

COMMONWEALTH OF MASSACHUSETTS

SUPREME JUDICIAL COURT

SJC NO. 10382

AC NO. 2007-P-0886

COMMONWEALTH OF MASSACHUSETTS,

Appellee

v.

PAUL SHANLEY,

Appellant

ON APPEAL FROM A JUDGMENT OF THE SUPERIOR COURT

BRIEF OF THE LEADERSHIP COUNCIL AS AMICUS CURIAE

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<i>Herald v. Hood</i> , 1993 WL 277541 (Oh. App.9 Dist., Summit County, July 21, 1993), appeal dismissed, 639 N.E. 2d 109 (Oh. 1994), <i>cert. denied</i> , 115 S.Ct. 1363 (1995) ..	44, 45
<i>Hoult v. Hoult</i> , 57 F.3d 1 (1st Cir. 1995).....	45
<i>Isley v. Capuchin Province</i> , 877 F.Supp. 1055 (E.D. Mich. 1995).....	42, 45
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<i>Kelly v. Marcantonio</i> , 678 A.2d 873 (R.I. 1996).....	45
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<i>Sellery v. Cressey</i> , 48 Cal.App.4th 538, 55 Cal. Rptr.2d 706 (Cal. App. 2 Dist. 1996).....	44
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<i>State v. Walters</i> , Nos. 93-S-2111-2112 (Superior Ct., Hillsborough Co., N.H. 1995) ..	9, 33, 38
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TEXTS AND TREATISES

Alpert, J. L., Brown, L. S., & Courtois, C. Symptomatic Clients and Memories of Childhood Abuse: What the Trauma and Child Sexual Abuse Literature Tell Us. In J. L. Alpert, L. S. Brown, S. J. Ceci, C.A. Courtois, E. F. Loftus, & P.A. Ornstein: <i>Working Group on Investigation of Memories of Childhood Abuse: Final Report</i> , 71-2 (American Psychological Association, 1996).....	8
American Medical Association, Council on Scientific Affairs, <i>Memories of Childhood Abuse</i> (Washington, D.C.: American Medical Association, 1994).....	9
American Psychiatric Association, Statement of Memories of Sexual Abuse, 42 <i>International Journal of Clinical and Experimental Hypnosis</i> , 261, 262 (1993).	38
American Psychiatric Association: <i>Diagnostic and Statistical Manual of Mental Disorders</i> (4 th ed). (Washington, DC: American Psychiatric Association Press, 1994).....	3, 6, 36
American Psychological Association Public Interest Government Relations Office, <i>Child Abuse and Neglect</i> , 1 (n.d.).	8
American Psychological Association, <i>Violence and the Family: Report of the American Psychological Association Presidential Task Force on Violence and the Family</i> . (American Psychological Association, 1996).....	8
Anderson, M. C., & Green, C., Suppressing Unwanted Memories by Executive Control, 410 <i>Nature</i> 366-369 (2001, March 15).	22
Andrews, B., Morton, J., et al., The Recovery of Memories in Clinical Practice: Experiences and Beliefs of British Psychological Society Practitioners, 8 <i>The Psychologist: Bulletin of the British Psychological Society</i> 209-214 (1995)	12
Bass, A., Study Finds Traumatic Memories Can Be Recovered, <i>The Boston Globe</i> (January 26, 1995).....	27
Beckett, K. Culture and the Politics of Signification: The Case of Child Sexual Abuse, 43 <i>Social Problems</i> 57-75 (1996).....	26
Briere, J., Science Versus Politics in the Delayed Memory Debate: A Commentary, 23 <i>Counseling Psychologist</i> 290-93 (1995).....	26

British Psychological Society, <i>Report by the Working Group on Recovered Memories</i> (1995).	9
Brown, D., Schefflin, A., & Hammond, C. <i>Memory, Trauma Treatment, and the Law</i> (New York: Norton, 1998).	14, 38, 39
Brown, D., Schefflin, A., & Whitfield, C., Recovered Memories: The Current Weight of the Evidence in Science and in the Courts, <i>27 J. Psychiatry & L.</i> 5-156 (1999).	15
Bull, D., A Verified Case of Recovered Memories of Sexual Abuse, <i>53 Am. J. of Psychotherapy</i> 221-224 (1999)	31
Carlson, E., & Rosser-Hogan, R., Mental Health Status of Cambodian Refugees Ten Years After Leaving Their Homes, <i>63 Am. J. of Orthopsychiatry</i> 223-231 (1993).	14
Center for Disease Control and Prevention, <i>Acute Mental Health Response to Children Affected by Terrorism</i> (Atlanta, GA)	7
Cheit, R., Consider This, Skeptics of Recovered Memory, <i>8 Ethics & Behav.</i> 141-160 (1998)	31
Chu, J.A., Frey, L.M., et al., Memories of Childhood Abuse: Dissociation, Amnesia, and Corroboration, <i>156 Am. J. Psychiatry</i> 749-55 (1999).	32
Corwin, D. L., & Olafson, E., Videotaped Discovery of a Reportedly Unrecallable Memory of Child Sexual Abuse: Comparison With a Childhood Interview Videotaped 11 Years Before, <i>2 Child Maltreatment</i> 91-112 (1997)	31
Cummings, K., Morley, C., & Hyland, A., Failed Promises of the Cigarette Industry and Its Effect on Consumer Misperceptions About the Health Risks of Smoking, <i>11 Tobacco Control</i> 110, 115 (2002).	25
Dalenberg, C. C., Recovered Memory and the Daubert Criteria: Recovered Memory as Professionally Tested, Peer Reviewed, and Accepted in the Relevant Scientific Community, <i>7 Trauma, Violence & Abuse</i> 274, 285 (2006).	20, 25, 33, 34
Dalenberg, C., Accuracy, Timing and Circumstances of Disclosure in Therapy of Recovered and Continuous Memories of Abuse, <i>24 J. Psychiatry & L.</i> 229 (1996).	29
Danmeyer, M. D., Nightengale, N. N. & McCoy, M. L., Repressed Memory and Other Controversial Origins of Sexual Abuse Allegations: Beliefs Among Psychologists and Clinical Social Workers, <i>2 Child Maltreatment</i> 252-263 (1998).	11
Davis, P. J. Repression and the Inaccessibility of Affective Memories. <i>52 J. Personality & Soc. Psychol.</i> 585-93 (1987).	22
Duggal, S., & Sroufe, L. A., Recovered Memory of Childhood Sexual Trauma: A Documented Case from a Longitudinal Study, <i>11 J. of Traumatic Stress</i> 301-321 (1998).	30
Dunn, G.E. Paolo, A.M., et al., Belief in the Existence of Multiple Personality Disorder Among Psychologists and Psychiatrists,” <i>50 J. of Clinical Psychology</i> 454-457 (1994).	11

Ezzati-Rice, T. M., & Murphy, R. S., Issues Associated with the Design of a National Probability Sample for Human Exposure Assessment, 103(Suppl 3) <i>Environ. Health Perspect.</i> 55-59 (1995).....	18
Frances, A., Widiger, T. A., & Pincus, H., The Development of DSM-IV, 46 <i>Arch. Gen. Psychiatry</i> 373-375 (1989).....	4, 5
Geraerts, E., & McNally, R. J. Forgetting Unwanted Memories: Directed Forgetting and Thought Suppression Methods. 127 <i>Acta. Psychol. (Amst)</i> 614-22 (2008).....	23
Geraerts, E., McNally, R. J., Jelicic, M., et al., Linking Thought Suppression and Recovered Memories of Childhood Sexual Abuse, 16 <i>Memory</i> 22-8 (2008).	23
Geraerts, E., Schooler, J.W., Merckelbach, H., et al., The Reality of Recovered Memories: Corroborating Continuous and Discontinuous Memories of Childhood Sexual Abuse, 18 <i>Psychological Science</i> 564-568 (2007).	28
Ghetti, S., Edelstein, R. S., et al., What Can Subjective Forgetting Tell Us About Memory for Childhood Trauma? 34 <i>Mem. Cognit.</i> 1011-25 (2006).....	17, 27
Gothard, S., & Ivker, N. A. C., The Evolving Law of Alleged Delayed Memories of Childhood Sexual Abuse, 5 <i>Child Maltreatment</i> 176-189 (2000).	41
Herman, J. L., & Harvey, M. R., Adult Memories of Childhood Trauma: A Naturalistic Clinical Study, 10 <i>J. of Traumatic Stress</i> 557-571 (1997).	17, 29
<i>International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)</i> (the U.S. version of the ICD-9).	7
International Society for Traumatic Stress Studies, <i>Childhood Trauma Remembered: A Report on the Current Scientific Knowledge Base and its Applications</i> , 23 (1997).	9
International Society for Traumatic Stress Studies, <i>supra</i> at 13.....	37
<i>International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10, 2007)</i>	7
Kamena, M., Repressed/False Childhood Sexual Abuse Memories: A Survey of Therapists, Paper presented at the 106th Annual Convention of the American Psychological Association, Sexual Abuse Memories Symposium, San Francisco (1998, August).....	12
Kikuchi, H., Fujii, T., Abe, N., et al., Memory Repression: Brain Mechanisms Underlying Dissociative Amnesia, <i>J Cogn Neurosci.</i> (2009, Mar 20) [Epub ahead of print].....	23, 24
Kuch, K., & Cox, B., Symptoms of PTSD in 124 Survivors of the Holocaust. 149 <i>Am. J. of Psychiatry</i> 337-340 (1992).	14
Linden, D. E., The Working Memory Networks of the Human Brain, 13 <i>Neuroscientist</i> 257-67 (2007).....	39
Lindsay, D. S., & Read, J. D., “Memory Work” and Recovered Memories of Childhood Sexual Abuse: Scientific Evidence and Public, Professional and Personal Issues, 1 <i>Psychol., Public Policy & L.</i> 846, 894 (1995).	33

Loftus, E. F., et al., Memories of Childhood Sexual Abuse: Remembering and Repressing 18 <i>Psychol. of Women Q.</i> 67 (1994).....	18
Orr, S. P., Lasko, N. B., Metzger, L. J., et al., Psychophysiologic Assessment of PTSD in Adult Females Sexually Abused During Childhood, 821 <i>Ann. of the N. Y. Acad. of Sciences</i> , 491-493 (1997).....	30
Palm, K. M. & Gibson, P., Recovered Memories of Childhood Sexual Abuse: Clinician’s Practices and Beliefs, 29 <i>Professional Psychology</i> 257-261 (1998).....	12
Polusny, M. A., & Follette, V. M., Remembering Childhood Sexual Abuse: A National Survey of Psychologists’ Clinical Practices, Beliefs, and Personal Experiences, 27 <i>Professional Psychology</i> 41-52 (1996).....	12
Pope, H. G., Hudson, J., Bodkin, J., & Oliva, P., Questionable Validity of “Dissociative Amnesia” in Trauma: Evidence from Prospective Studies, 172 <i>British Journal of Psychiatry</i> 210-215 (1998)	20
Pope, H.G., Oliva, P.S., et al., Attitudes Toward DSM-IV Dissociative Disorders Diagnoses Among Board-Certified American Psychiatrists, 156 <i>American Journal of Psychiatry</i> 321-323 (1999).....	12
Pope, K. S. & Tabachnick, B. G., Recovered Memories of Abuse Among Therapy Patients: A National Survey, 5 <i>Ethics & Behavior</i> 237-248 (1995).	11
Reviere, S. L., <i>Memory of Childhood Trauma: A Clinicians Guide to the Literature</i> (New York: Guilford Press, 1996).....	38
Rivers, W. H R., The Repression of War Experiences. <i>Lancet</i> , 194, 717 (1918).....	13
Sargent, W., & Slater, E., Amnesic Syndromes in War, 34 <i>Proceedings of the Royal Society of Medicine</i> 757-764 (1941).	14
Schaffer, D., A Participant’s Observations: Preparing DSM-IV, 41 <i>Can. J Psychiatry</i> 325-329 (1996).....	4
Schefflin, A., and Brown, D., Repressed Memory or Dissociative Amnesia: What the Science Says, 24 <i>J. Psychiatry & L.</i> 143,183 (1996).....	33
Schooler, J. W., Ambadar, Z., & Bendiksen, M. A., A Cognitive Corroborative Case Study Approach for Investigating Discovered Memories of Sexual Abuse, in <i>Recollections of Trauma: Scientific Evidence and Clinical Practice</i> , 379-388 (J. D. Read & D. S. Lindsay eds., 1997).....	31
Schooler, J. W., Bendiksen, M. A., & Ambadar, Z., Taking the Middle Line: Can We Accommodate Both Fabricated and Recovered Memories of Sexual Abuse? in <i>False and Recovered Memories</i> , 251–292 (M. Conway, ed., 1997).....	31
Shobe, K. K., & Schooler, J. W., Discovering Fact and Fiction: Case-Based Analyses of Authentic and Fabricated Memories of Abuse, in <i>Recovered Memories: Seeking the Middle Ground</i> , 95-151 (G. M. Davies & T. Dalgleish, eds., 2001).	31
Smith, S. M., & Moynan, S. C., Forgetting and Recovering the Unforgettable, 19 <i>Psychological Science</i> 462-468 (2008).	22

Stanton, M. U-Turn on Memory Lane, <i>Columbia Journalism Review</i> 44-9 (July/Aug. 1997).....	25, 26
Thom, D. A. & Fenton, N., Amnesias in War Cases, <i>76 American Journal of Insanity</i> 437-448 (1920).....	13
Tulving, E., and Craik, F. I. M., <i>The Oxford Handbook of Memory</i> 620 (Oxford University Press, 2005)	39
Van der Kolk, B. A., et al., Dissociation, Somatization, and Affect Dysregulation: The Complexity of Adaptation of Trauma, 153(7 Suppl) <i>Am. J. Psychiatry</i> 83-93 (1996).	5
Wakefield, Interview: Hollida Wakefield and Ralph Underwager, 3 <i>Paidika: J. Paedophilia</i> 12 (1993).....	21
Weine, S. M., Becker, D.F. et al., Psychiatric Consequences of “Ethnic Cleansing”: Clinical Assessments and Trauma Testimonies of Newly Resettled Bosnian Refugees, 152:4 <i>Am. J. Psychiatry</i> 536 (1995).....	14
Widiger, T., Frances, A., Pincus, H., & Davis, W. W., The DSM-IV literature Reviews: Rationale, Process, and Limitations, 12 <i>J Psychopathol. Behav. Assess.</i> 189-202 (1990).....	4
Widiger, T., Frances, A., Pincus, H., et al. Toward an empirical classification for the DSM-IV. 100 <i>J. Abnormal Psychol.</i> 280-288 (1991).	4
Williams, L. M., Recall of Childhood Trauma: A Prospective Study of Women’s Memories of Child Sexual Abuse, 62 <i>J. Consulting & Clinical Psych.</i> 1167-76 (1994).	16
Williams, L., Recovered Memories of Abuse in Women with Documented Child Sexual Victimization Histories, 8 <i>J. Traumatic Stress</i> 649 (1995).....	16, 27
Wilsnack, S. C., et al., Self-reports of Forgetting and Remembering Childhood Sexual Abuse in a Nationally Representative Sample of US Women. 26 <i>Child Abuse & Neglect</i> 139-147 (2002).....	18, 32

STATEMENT OF INTEREST OF AMICUS CURIAE

The Leadership Council for Child Abuse and Interpersonal Violence (formerly the Leadership Council on Mental Health, Justice, and the Media; hereafter “the Leadership Council”) was founded in 1998 by professionals concerned with the ethical application of psychological science to human welfare. The Leadership Council is a 501(c)(3) organization, located at 191 Presidential Boulevard, Bala Cynwyd, PA. The Leadership Council is a nonprofit scientific and professional organization consisting of internationally recognized researchers and scholars within the scientific and legal communities. The mission of the Leadership Council is to provide professionals, officers of the court, and policy makers with the latest and most accurate scientific information on issues related to interpersonal violence. As part of its mission, the Leadership Council disseminates high quality scientific and medical research concerning the prevalence and consequences of child abuse and other forms of interpersonal violence in the general population.

The Leadership Council has previously filed amicus briefs in both state and federal court cases, including a brief with this Court in *Commonwealth v. Frangipane*, 433 Mass. 527 (2001), the substance of which is in part the focus of these proceedings. The Leadership Council has participated in and hosted academic conferences and has provided testimony before Congress and state legislatures. It has also supported peer-reviewed research and hosted academic conferences. Collectively, its board members have published hundreds of articles in peer-reviewed journals on the effects of trauma on children and adults. Advisory board members include internationally known forensic experts, clinical care providers for trauma victims, editors and reviewers for major journals, and leaders in both the American

Psychological Association and the American Psychiatric Association.¹ For example, the Council's president, Dr. Paul Fink, is a past president of the American Psychiatric Association. He is also the former president of the American College of Psychiatrists, the National Association for Psychiatric Healthcare Systems, the Philadelphia County Medical Society, and the American Association of Chairmen of Departments of Psychiatry.

As such, *Amicus* is familiar with and has an interest in participating in this appeal and seeks to provide this Court with relevant scientific and other information related to the likely impact of these proceedings on victims of trauma and other interested third-parties.

¹ A list of the Leadership Council Scientific Advisory Board members is attached hereto as Appendix 1.

INTRODUCTION

The Leadership Council submits this amicus brief on the issue of whether “repressed memory” evidence should be admissible in the Commonwealth. Appellant asserts that “...‘repressed memory’ is a pernicious, unreliable, junk science notion without scientific verification” which supposedly led the judge to decide the defendant’s *Lanigan* motion in error. (Def. Mot. 5-6; Def. Memo. at 64). Appellant further claims that a *Lanigan* hearing would have established that repressed memory is “a hypothesized phenomenon that has been rejected by the relevant scientific community, has not been subjected to adequate study using valid scientific methodology, and has been subjected to research so flawed that it is without error rates, controls or standardization.” *Id.*

This Brief explains why Appellant’s position is wholly inaccurate regarding scientific acceptance of dissociative memory loss² and why this Court’s determination that testimony on dissociative memory loss and recovery, from an otherwise qualified expert, is admissible without a *Lanigan* hearing, is correct. *See Commonwealth v. Frangipane*, 433 Mass. 527, 537-538 (2001).

It should be noted that the Amicus Brief filed by the False Memory Syndrome Foundation (FMSF) in the current case spends considerable time attacking a brief of the Leadership Council submitted to this Court in *Frangipane*. This brief provides important updated scientific and legal support further strengthening the Leadership Council’s position in that case. It should also be pointed out that the FMSF brief heavily relies on ad hominem arguments and false accusations of dishonesty and intentional misrepresentation. While ample

² Throughout the brief we refer to “dissociative amnesia” and “dissociative memory loss” to describe loss of traumatic memory that is too extensive to be explained by ordinary forgetting. No specific mechanism or theory is implied. This memory loss is known by other labels such as delayed memory, recovered memory, repressed memory, etc. For the purposes of this brief, these terms are used interchangeably.

data exists to refute these claims, the Leadership Council has submitted this brief intentionally bereft of arguments that might dignify such unprofessional assertions, in agreement with Attorney Louis Nizer who famously said, “mud thrown is ground lost.”

ARGUMENT

A LANIGAN HEARING SHOULD NOT BE REQUIRED BEFORE A QUALIFIED EXPERT IS PERMITTED TO TESTIFY ABOUT DISSOCIATIVE MEMORY LOSS

A. The Relevant Scientific Community Has Accepted that Full or Partial Forgetting of Genuine Memories of Abuse Can Occur

In *Lanigan, supra*, this Court adopted, in part, the *Daubert* standard (*Daubert v. Merrell Dow Pharmaceuticals, Inc.* 61 U.S.L.W 4805 [1993]) which set forth five factors that a judge should consider in determining the reliability of proposed scientific evidence. The five factors are whether the scientific theory or process: (1) has been generally accepted in the relevant scientific community; (2) has been, or can be, subjected to testing; (3) has been subjected to peer review and publication; (4) has an unacceptably high known or potential rate of error; and (5) is governed by recognized standards. *Commonwealth v. Lanigan*, 419 Mass. 15, 25-27 (1994). This Court later held that the general acceptance of a theory or process within the relevant community, on its own, is sufficient to establish requisite reliability for admission in Massachusetts courts regardless of other *Daubert* factors. *Commonwealth v. Powell*, 450 Mass. 229, 238-240 (2007).

Dissociative amnesia easily meets this test for the following reasons:

1. Major Professional Associations Recognize that Full or Partial Forgetting of Genuine Memories of Abuse Can Occur

That the brain can avoid conscious recall of traumatic information has long been recognized by the American Psychiatric Association and the professional mental health community. Indeed, it is explicitly described as a phenomenon in the 1994 *Diagnostic and*

Statistical Manual of Mental Disorders, 4th Edition, the main diagnostic manual used by psychiatrists and psychologists, American Psychiatric Association: *Diagnostic and Statistical Manual of Mental Disorders* (4th ed). (Washington, DC: American Psychiatric Association Press, 1994) (hereafter DSM-IV) and continues to be recognized in updated revisions including the DSM-IV, released in 2000 (hereafter DSM-IV-TR).

The DSM-IV recognizes memory impairment to be a common feature of six post-traumatic conditions: *Post-Traumatic Stress Disorder (PTSD)*, *Acute Stress Disorder*, *Dissociative Amnesia*, *Dissociative Fugue*, *Dissociative Disorder Not-Otherwise-Specified*, and *Dissociative Identity Disorder*. The term “dissociative amnesia” appears as follows in section 300.12 of the DSM-IV:

Dissociative amnesia is characterized by an inability to recall important personal information, usually of a traumatic or stressful nature, that is too extensive to be explained by ordinary forgetfulness.³

Id. at 478. This definition, alone, demonstrates that the concept of recovered memory is generally accepted in the relevant scientific community.

According to the authors of the manual, the diagnostic categories of DSM-IV attempt to reflect “a consensus of current formulations of evolving knowledge in our field” (DSM-IV-TR at xxvii). Some diagnoses, such as premenstrual dysphoric disorder and binge eating disorder, did not meet DSM-IV standards for consensus and appear only as proposed diagnoses in appendix B (DSM-IV-TR at 703). But other diagnoses, including dissociative amnesia, attained official status in DSM-IV. Official recognition of dissociative amnesia in DSM-IV-TR is strong evidence that the phenomenon is generally accepted within the field.

Although some argue that inclusion of a diagnosis in the DSM-IV is not evidence of

³ The DSM further notes that “[t]he reported duration of the events for which there is amnesia may be minutes to years. . . . Some individuals with chronic amnesia may gradually begin to recall dissociated memories.”

its scientific validity, the development of the manual was carefully planned and was based on rigorous scientific standards. Schaffer, D., A Participant's Observations: Preparing DSM-IV, 41 *Can. J. Psychiatry* 325-329 (1996). The DSM-IV published in 1994 listed 297 disorders in 886 pages. The process was overseen by a steering committee of 27 people, including four psychologists. The steering committee created 13 work groups of 5-16 members. Each work group had approximately 20 advisers. A series of critical reviews were commissioned for each set of diagnoses to determine whether there was any new empirical evidence that would warrant changing diagnostic descriptions and definitions.

A three-stage process of empirical review informed all decisions. Widiger, T., Frances, A., Pincus, H., et al. Toward an empirical classification for the DSM-IV. 100 *J. Abnormal Psychol.* 280-288 (1991). The three stages included (a) comprehensive and systematic reviews of the published literature, (b) reanalyses of already collected but previously unanalyzed data sets, and (c) field trials. *Id.*

In the first stage, each group conducted an extensive literature review of their diagnoses. The Work Groups generated 150 literature reviews on questions most crucial to the development of DSM-IV. A standard format was used to ensure that these reviews would be methodical, objective, and comprehensive. Frances, A., Widiger, T. A., & Pincus, H., The Development of DSM-IV, 46 *Arch. Gen. Psychiatry* 373-375 (1989); Widiger, T., Frances, A., Pincus, H., & Davis, W. W., The DSM-IV literature Reviews: Rationale, Process, and Limitations, 12 *J Psychopathol. Behav. Assess.* 189-202 (1990). Reviews were then carefully critiqued by Work Group members and advisors to ensure balance and cohesiveness. The goal was for DSM-IV decisions to reflect the conclusions of an ideal "consensus scholar" and not be unduly influenced by the preconceptions of the participants. Frances, A., Mack, A. H.,

Ross, R., & First, M. B. The DSM-IV Classification and Psychopharmacology. In *Psychopharmacology: The Fourth Generation of Progress* (Lippincott Williams & Wilkins, 2002).

In the second stage of the review, Working Groups requested data from researchers and conducted analyses to determine which criteria required change. All proposed diagnoses had to be supported by sound empirical evidence and reviewers were instructed to be conservative. The third stage consisted of field trials sponsored by the National Institute of Mental Health (DSM-IV at xix). Diverse sites, with representative groups of subjects from a range of sociocultural and ethnic backgrounds, were selected to ensure generalizability of field-trial results. *Id.* at xix.

The findings of the DSM-IV Posttraumatic Stress Disorder (PTSD) Field Trial supported the existence of dissociative amnesia. The DSM-IV field trial for PTSD studied 395 traumatized treatment-seeking subjects and 125 non-treatment-seeking subjects who had also been exposed to traumatic experiences. PTSD and dissociation were found to be highly interrelated. Moreover, subjects who had suffered interpersonal abuse at or before age 14 developed significantly more dissociative problems than those traumatized after age 14. Van der Kolk, B. A., et al., Dissociation, Somatization, and Affect Dysregulation: The Complexity of Adaptation of Trauma, 153(7 Suppl) *Am. J. Psychiatry* 83-93 (1996). Van der Kolk and colleagues concluded that PTSD and dissociation often occur together and represent a spectrum of adaptations to trauma. *Id.*

The FMSF brief rejects the notion that inclusion of dissociative disorders in the DSM provides evidence for the existence of the phenomenon. The FMSF brief then states that the

DSM was not written for use in the forensic setting, quoting the following passage from the DSM-IV:

When the DSM-IV categories, criteria, and textual descriptions are employed for forensic purposes, there are significant risks that diagnostic information will be misused or misunderstood. These dangers arise because of the imperfect fit between the questions of ultimate concern to the law and the information contained in a clinical diagnosis.

FMSF Brief, at 31-32. The FMSF brief fails, however, to note the context of the DSM's caveat. When the passage is read in its entirety, it is clear that the authors of the DSM-IV were educating readers about the differences between clinical and legal standards for determining mental incompetence or disability.

When the DSM-IV categories, criteria, and textual descriptions are employed for forensic purposes, there are significant risks that diagnostic information will be misused or misunderstood. These dangers arise because of the imperfect fit between the questions of ultimate concern to the law and the information contained in a clinical diagnosis. *In most situations, the clinical diagnosis of a DSM-IV mental disorder is not sufficient to establish the existence for legal purposes of a "mental disorder," "mental disability," "mental disease," or "mental defect."* In determining whether an individual meets a specified legal standard (e.g., for competence, criminal responsibility, or disability) additional information is usually required beyond that contained in the DSM-IV diagnosis. This might include information about the individual's functional impairments and how these impairments affect the particular abilities in question. (emphasis added)

DSM-IV at xxiii. While the DSM does not set legal standards for determining mental incompetence, it does set clinical standards for diagnosis of mental problems. The DSM-IV states that the manual "reflects a *consensus* about the classification and diagnosis of mental disorders derived at the time of its initial publication." (emphasis added) *Id.* at xxiii.

Nor is the American Psychiatric Association alone in recognizing the reality of dissociative phenomena. Dissociative amnesia is also recognized by the World Health

Organization in their inclusion of this disorder in the *International Statistical Classification of Diseases and Related Health Problems* 10th Revision (ICD-10, 2007).⁴

F44.0 Dissociative amnesia

The main feature is loss of memory, usually of important recent events, that is not due to organic mental disorder, and is too great to be explained by ordinary forgetfulness or fatigue. The amnesia is usually centred on traumatic events, such as accidents or unexpected bereavements, and is usually partial and selective.

The ICD-10 is the international standard diagnostic classification for all general epidemiological, many health management purposes, and clinical use. *Id.*

Similarly, dissociative amnesia is recognized by the U.S. Department of Health and Human Services and the Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics (the principal health statistics agency for the U.S.), in their inclusion of this disorder in the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM) (the U.S. version of the ICD-9).⁵ The Center for Disease Control and Prevention also recognizes dissociative reactions to trauma in a number of recent publications. For example, in its paper, *Acute Mental Health Response to Children Affected by Terrorism*, evaluating dissociative symptoms was placed at the top of a list of symptoms that mental health professionals should assess for in children affected by terrorism:

Acute Mental Health Mental Status Examination must include specifics concerning acute and post-traumatic symptoms

- i. Evaluation of dissociative symptoms...

Center for Disease Control and Prevention, *Acute Mental Health Response to Children Affected by Terrorism* (Atlanta, GA), at 5.⁶

⁴ Available online at <http://www.who.int/classifications/apps/icd/icd10online/>

⁵ Code Nos. 300.12 (Psychogenic amnesia; hysterical amnesia), 300.14 (Multiple personality; dissociative identity disorder), and 300.15 (Dissociative disorder or reaction, unspecified). DHHS Publication No. (PHS) 94-1260.

⁶ Available online at <http://emergency.cdc.gov/children/PDF/working/mental.pdf>

The American Psychological Association also recognizes dissociative reactions. For example, the American Psychological Association's Public Interest Government Relations Office noted, "Mental health problems often resulting from child abuse and neglect include depression, anxiety and dissociative disorders..." American Psychological Association Public Interest Government Relations Office, *Child Abuse and Neglect*, 1 (n.d.).⁷ Dissociative amnesia was also recognized in the American Psychological Association's 1996 report on Violence and the Family. American Psychological Association, *Violence and the Family: Report of the American Psychological Association Presidential Task Force on Violence and the Family* (American Psychological Association, 1996) at 73 (noting "Absent or delayed memories about the abuse may be caused by dissociative amnesia..."). Delayed recall of abuse memories was also recognized in the American Psychological Association's *Final Report from the Working Group on Investigation of Memories of Childhood Abuse*. Alpert, J. L., Brown, L. S., & Courtois, C. Symptomatic Clients and Memories of Childhood Abuse: What the Trauma and Child Sexual Abuse Literature Tell Us. In J. L. Alpert, L. S. Brown, S. J. Ceci, C.A. Courtois, E. F. Loftus, & P.A. Ornstein: *Working Group on Investigation of Memories of Childhood Abuse: Final Report*, 71-2 (American Psychological Association, 1996). FMSF board member Elizabeth Loftus participated in the working group. As the judge in a past case noted:

. . . even Dr. Loftus conceded upon cross-examination that the APA policy which she helped to create notes that "it is possible for memories of abuse that have been forgotten for a long time to be remembered . . ." The language of the APA report indicates that the challenge to recovered memories which is included therein concerns the mechanism by which the delayed recall occurs, rather than the fact of its occurrence . . . Furthermore, Dr. Loftus acknowledged that dissociation from a traumatic event is a recognized phenomenon.

⁷ Available online at http://www.apa.org/ppo/pi/child_abuse_and_neglect_fact_sheet.pdf

State v. Walters, Nos. 93-S-2111-2112 (Superior Ct., Hillsborough Co., N.H. 1995), at 22-24.

Additionally, the American Medical Association, in its 1994 Report of the Council on Scientific Affairs, considered the view that repressed memories do not exist to be “extreme” and cited studies showing that there are cases where amnesia for childhood sexual abuse exists and the “recovered memories proved to be correct.” American Medical Association, Council on Scientific Affairs, *Memories of Childhood Abuse* (Washington, D.C.: American Medical Association, 1994).

The most thoughtful report on recovered memories was issued by the British Psychological Society. British Psychological Society, *Report by the Working Group on Recovered Memories* (1995). After an investigation of the effect of trauma on memory, the Society concluded that “forgetting of certain kinds of trauma is often reported” for very different kinds of trauma ranging from war trauma to childhood sexual abuse. *Id.* at 14. The report further concluded that the available evidence suggests that between one third and two thirds of abuse victims have periods of time when they “totally or partially forgot the abuse.” *Id.* at 13.

Dissociative amnesia was recognized by the International Society for Traumatic Stress Studies (ISTSS) in the report *Childhood Trauma Remembered*. The report states:

We know that people forget childhood traumas and that this is not limited to people in treatment or to people whose trauma is sexual abuse. We also know that people can accurately recall memories of documented childhood trauma that they report having previously forgotten, and that a wide range of triggers seem to be associated with these memories.

International Society for Traumatic Stress Studies, *Childhood Trauma Remembered: A Report on the Current Scientific Knowledge Base and its Applications*, 23 (1997).

In summary, there is ample evidence that traumatic memory loss and recovery is accepted by the major scientific organizations representing mental health practitioners. This

wealth of documentation and professional acknowledgment contrasts sharply with that for so-called “false memory syndrome,” which, despite years of attention in the media, has failed to be supported by research and is not recognized as a valid diagnostic entity by any national or international health organization. Thus, those who argue against the mind’s ability to dissociate and later recover memories are in the minority. Under the *two schools of thought* doctrine, the burden of proof is on the minority school of thought to demonstrate that it is respectable, not on the majority to prove that it is right.⁸

2. There is General Acceptance for Dissociative Phenomena in the Relevant Scientific Community

Seven randomized scientific surveys of mental health professionals have been conducted in the past decade which specifically examined the issue of general acceptance of dissociative amnesia among various groups of mental health professionals. An eighth survey addressed dissociative disorders in general. The results of these surveys provide strong support for the conclusion that dissociative amnesia is generally accepted among mental health practitioners.

Appendix 2 provides a table which summarizes the data across all eight published randomized surveys on dissociative amnesia. The data across surveys include data from psychiatrists, social workers, and both clinical and experimental psychologists. Column 3 shows that the percentage of relevant professionals who do not believe that dissociative amnesia or repressed memories exist ranges from 4-25% and averages 9%, with non-clinical, experimental psychologists and biologically-oriented psychiatrists comprising the greater portion of those who do not believe in the concept. Column 4 shows the percentage of professionals who somewhat believe in the concept ranges from 25-48% and averages 37%.

⁸ *Jones v. Chidester*, 531 Pa 31, 610 A 2nd 964 (1992).

Column 5 shows that the percentage of professionals who believe in the existence or validity of dissociative amnesia/repressed memories ranges from 23-71% and averages 53%. Across surveys the percentage of all professionals endorsing the concept of dissociative amnesia/repressed memories as valid or somewhat valid averages 90%, leaving an average of only 9% who do not at all believe in the concept.

Danmeyer et al. surveyed 398 psychologists and social workers. Danmeyer, M. D., Nightengale, N. N. & McCoy, M. L., *Repressed Memory and Other Controversial Origins of Sexual Abuse Allegations: Beliefs Among Psychologists and Clinical Social Workers*, 2 *Child Maltreatment* 252-263 (1998). Only 7% of experimental psychologists, 3% of clinical psychologists with research involvement, and 2% of clinicians with no research involvement reported that they held the view that accurate recovered memories of trauma are *not* possible (rating the possibility of loss and recovery of a trauma memory as 1 or 2 on a 1 to 10 point scale of validity). *Id.*

Dunn et al. surveyed 1,120 Veterans' Administration (VA) psychologists and psychiatrists regarding their beliefs about dissociative disorders. Dunn, G.E. Paolo, A.M., et al., *Belief in the Existence of Multiple Personality Disorder Among Psychologists and Psychiatrists*," 50 *J. of Clinical Psychology* 454-457 (1994). Dunn et al. found "More than 98% of respondents indicated that they believed in dissociative disorders" (*id.* at 454) and that "dissociative disorders constitute legitimate diagnostic entities" (*id.* at 455).

In a survey of psychologists by Pope and Tabachnick, 73% of psychologists reported that they had personally seen a case that they classified as a recovered memory. Pope, K. S. & Tabachnick, B. G., *Recovered Memories of Abuse Among Therapy Patients: A National Survey*, 5 *Ethics & Behavior* 237-248 (1995). Polusny and Follette found that 28% of

psychologists reported that they had seen a case of repressed memory in the previous year.

Polusny, M. A., & Follette, V. M., Remembering Childhood Sexual Abuse: A National Survey of Psychologists' Clinical Practices, Beliefs, and Personal Experiences, 27 *Professional Psychology* 41-52 (1996).

The remaining surveys found similar evidence of acceptance. Palm, K. M. & Gibson, P., Recovered Memories of Childhood Sexual Abuse: Clinician's Practices and Beliefs, 29 *Professional Psychology* 257-261 (1998); Pope, H.G., Oliva, P.S., et al., Attitudes Toward DSM-IV Dissociative Disorders Diagnoses Among Board-Certified American Psychiatrists, 156 *American Journal of Psychiatry* 321-323 (1999); Andrews, B., Morton, J., et al., The Recovery of Memories in Clinical Practice: Experiences and Beliefs of British Psychological Society Practitioners, 8 *The Psychologist: Bulletin of the British Psychological Society* 209-214 (1995); Kamena, M., *Repressed/False Childhood Sexual Abuse Memories: A Survey of Therapists*, Paper presented at the 106th Annual Convention of the American Psychological Association, Sexual Abuse Memories Symposium, San Francisco (1998, August).

In summary, not only is there is ample evidence that traumatic amnesia and recovery of memories is accepted by major scientific organizations, there is also strong support for the conclusion that dissociative amnesia is generally accepted among mental health practitioners. Thus evidence regarding traumatic amnesia and/or recovered memory is reliable and admissible in judicial proceedings.

B. A Wealth of Scientific Literature Documents the Reality of Dissociative Phenomena

Although the more typical response to trauma is hyperamnesia (the inability to forget), a substantial minority of trauma patients are consistently diagnosed with amnesia.⁹ Moreover, dissociative amnesia has been thoroughly documented as a response to a variety of traumatic events in literally hundreds of studies. Over the last century, mental health experts have documented traumatic amnesia in response to war trauma, the Holocaust, refugee experiences and natural disasters.

For example, high rates of amnesia were found in World War I soldiers returning from the battle field. In 1918, Dr. Rivers, a physician who treated these men, wrote about their repression of their war experiences. Rivers noted:

It is natural to thrust aside painful memories just as it is natural to avoid dangerous or horrible scenes in actuality, and this natural tendency to banish the distressing is especially pronounced in those whose powers of resistance have been lowered by the long-continued strains of trench life, the shock of explosion, or other catastrophes of warfare.

Rivers, W. H. R., The Repression of War Experiences. *Lancet*, 194, 717 (1918). *See also*, Thom, D. A. & Fenton, N., Amnesias in War Cases, 76 *American Journal of Insanity* 437-448 (1920).

The phenomenon of psychogenic amnesia was again documented in World War II. Sargant and Slater (1941) conducted an extensive review of amnesia for war trauma, examining 1,000 serial admissions to a military hospital. Psychological amnesia was present

⁹ Some critics have argued that traumatic events cause hyperamnesia, not amnesia. Numerous studies exist that show that traumatic events caused either hyperamnesia or amnesia, or both, in the same individual at different points in time. McNally's book *Remembering Trauma* (2003, Harvard University Press), for example, has made the logical error that because many traumatized individuals have vivid recollections of trauma, therefore, amnesia for trauma must not exist.

in 35% of 251 men who had been subjected to severe stress in the battlefield. Sargent, W., & Slater, E., Amnesic Syndromes in War, 34 *Proceedings of the Royal Society of Medicine* 757-764 (1941).

Psychologists working with World War II Holocaust survivors preparing for testimony in a war crime trial in the mid-1980s also noted traumatic amnesia for names or faces of perpetrators, even for events as extreme as concentration camp experiences. Wagenaar, W., & Groenweg, J., The Memory of Concentration Camp Survivors. 4 *Applied Cognitive Psychology*, 77-87 (1990). Another study of Holocaust survivors found a 3.8% rate of psychogenic amnesia in general concentration camp survivors and a 10% rate in the tattooed survivors of Auschwitz. Kuch, K., & Cox, B., Symptoms of PTSD in 124 Survivors of the Holocaust. 149 *Am. J. of Psychiatry* 337-340 (1992).

High rates of PTSD and dissociation have also been documented in refugees subjected to genocide in Cambodia; 90% of the refugees studied reported amnesia for past upsetting events. Carlson, E., & Rosser-Hogan, R., Mental Health Status of Cambodian Refugees Ten Years After Leaving Their Homes, 63 *Am. J. of Orthopsychiatry* 223-231 (1993). *See also*, Weine, S. M., Becker, D.F. et al., Psychiatric Consequences of “Ethnic Cleansing”: Clinical Assessments and Trauma Testimonies of Newly Resettled Bosnian Refugees, 152:4 *Am. J. Psychiatry* 536 (1995) (documenting full and partial amnesia in Bosnian refugees).

One of the strongest reviews of evidence regarding prevalence for dissociative amnesia was conducted by Brown, Schefflin and Hammond in their book, *Memory, Trauma Treatment, and the Law*. Brown, D., Schefflin, A., & Hammond, C. *Memory, Trauma Treatment, and the Law* (New York: Norton, 1998). Providing the most comprehensive review of the scientific literature on dissociative amnesia to date, the book set the standard in

the field after receiving the American Psychiatric Association's 1999 prestigious Manfred S. Guttmacher Award for that year's finest publication in law and forensic psychiatry.¹⁰

The authors reviewed 43 studies relevant to the subject of traumatic memory and found that every study that examined the question of dissociative amnesia in traumatized populations demonstrated that a substantial minority partially or completely forget the traumatic event experienced, and later recover memories of the event. Moreover, these studies demonstrate that dissociative amnesia can occur after any type of traumatic event. Some of the highest rates of either partial or full amnesia were found in adult victims of childhood sexual abuse.

A more recent review found that a total of 68 studies have been published that document dissociative amnesia after childhood sexual abuse. Brown, D., Schefflin, A., & Whitfield, C., *Recovered Memories: The Current Weight of the Evidence in Science and in the Courts*, 27 *J. Psychiatry & L.* 5-156 (1999). In fact, the authors found that *no* study that specifically looked for evidence of traumatic or dissociative amnesia after child sexual abuse failed to find it. *Id* at 126.

A total of 34 additional studies on complete forgetting of childhood sexual abuse have been published since the publication of Brown et al.'s 1999 review. In short, many, many scientific studies show that a significant minority of victims of childhood sexual abuse will completely or partially forget the abuse only to recover the memories later, after an extended period of memory incapacitation.

As these studies have appeared over the past 20 years, they have shown progressive methodological improvements and meet a common standard of reliability in science, that of

¹⁰ The book also received the Arthur Shapiro Award from the Society for Clinical and Experimental Hypnosis.

replication. Scientific standards hold that greater confidence can be placed in scientific findings when the scientific inquiry is conducted with different methodological strategies, by different investigators, with different sample populations, and across different sites. A summary of these studies is found in Appendix 3. Although space limitations prevent listing every study, a few of the more notable studies are worth mentioning.

For example, in a prospective study of women's memories of child sexual abuse, researchers interviewed 129 women with previously documented histories of sexual victimization in childhood. Williams, L. M., Recall of Childhood Trauma: A Prospective Study of Women's Memories of Child Sexual Abuse, 62 *J. Consulting & Clinical Psych.* 1167-76 (1994); Williams, L., Recovered Memories of Abuse in Women with Documented Child Sexual Victimization Histories, 8 *J. Traumatic Stress* 649 (1995); Williams, Consulting & Clinical Psych., *supra*, at 1167-76. Subjects were asked detailed questions about personal experiences including sexual abuse during childhood. Women who denied that any sexual abuse had occurred were asked if anyone else might have made such a report about them. Williams found that 38% of the women did not recall the abuse that had been documented 17 years earlier. In addition, 16% of those who recalled the abuse reported that at some time in the past they had forgotten about the abuse.

Another group of researchers performed a similar study and obtained similar results. Herman and Harvey reviewed written summaries of the clinical evaluations of 77 adult psychiatric outpatients reporting memories of childhood trauma. Herman, J. L., & Harvey, M. R., Adult Memories of Childhood Trauma: A Naturalistic Clinical Study, 10 *J. of Traumatic Stress* 557-571 (1997). A majority of patients reported some degree of continuous recall with roughly half (53%) reporting they had never forgotten the traumatic events. Two smaller

groups described a mixture of continuous and delayed recall (17%) or a period of complete amnesia followed by delayed recall (16%).

Ghetti and colleagues reported similar findings. Ghetti, S., Edelstein, R. S., et al., What Can Subjective Forgetting Tell Us About Memory for Childhood Trauma? 34 *Mem. Cognit.* 1011-25 (2006). Investigators examined the prevalence and predictors of subjective forgetting (i.e., self-reported amnesia) of child sexual abuse in 137 adults who, as children, were involved as victims in legal prosecutions. The rate of self-reported complete forgetting was 15% which is consistent with both Williams' and Herman and Harvey's findings of 16%. Also consistent with Williams' (1995) study is the finding that individuals were more likely to report forgetting when they experienced more severe abuse (i.e., increased physical force in Williams' sample). Ghetti et al. extended Williams' findings by including both males and females in the sample. It was found that males were more likely than females to report forgetting than females. *Id.* at 1016. Ghetti et al. also asked participants the reason they thought that they didn't remember the abuse. Among the individuals who reported periods of complete forgetting, the most frequently endorsed reasons they gave for not remembering the abuse were "I felt afraid, and I did not want to think about it" and "It was so horrible that I pushed it out of my mind" (86% and 81%, respectively). *Id.* at 1017.

Another group of researchers surveyed a national probability sample of 711 U.S. women, aged 26 years to 54 years. Wilsnack, S. C., et al., Self-reports of Forgetting and Remembering Childhood Sexual Abuse in a Nationally Representative Sample of US Women. 26 *Child Abuse & Neglect* 139-147 (2002). National probability sampling is a scientific means of making precise estimates of the prevalence and distributions of diseases or conditions effecting the overall population. Ezzati-Rice, T. M., & Murphy, R. S., Issues

Associated with the Design of a National Probability Sample for Human Exposure Assessment, 103(Suppl 3) *Environ. Health Perspect.* 55-59 (1995). More than one-fourth of respondents who indicated having been sexually abused reported that they had forgotten the abuse for some period of time but later remembered it on their own.

It is notable that every single one of the studies specifically addressing the issue of substantial forgetting of childhood sexual abuse, researchers found that some sub-group within the sample reported either full or partial substantial forgetting for the childhood sexual abuse. Moreover, in Dr. Loftus' own study of memories of sexual abuse, designed specifically to eliminate some of the flaws she identified in previous studies, 12% claimed to remember parts but not all of the abuse, while 19% claimed that they forgot the abuse for a period of time, and later the memory returned. Loftus, E. F., et al., Memories of Childhood Sexual Abuse: Remembering and Repressing 18 *Psychol. of Women Q.* 67 (1994).

Taken as a whole, especially considering the range of populations studied and the many different experimental designs utilized, the empirical research constitutes an irrefutable conclusion as the reality of recovered memory/dissociative amnesia phenomena. Nevertheless, "false memory" advocates have found fault with each type of study performed. The first, largely clinical, studies finding dissociative amnesia were criticized because of the possibility that false abuse memories could have been implanted in therapy. This criticism was addressed by studying non-clinical, community samples. The results again showed that a substantial proportion of abuse survivors reported having periods of amnesia for the abuse. These studies also demonstrated that most of the self-reported recovered memories of abuse were not associated with therapy and could not be explained as therapeutically "implanted" memories. The community samples were then criticized as having possible sample bias, thus,

studies were conducted utilizing random samples that corrected for that possibility. The random sample studies again documented substantial evidence of amnesia in adults who reported having been sexual abused as a child. Studies of random samples were then criticized for relying on sometimes uncorroborated self-reports of abuse. Thus, studies were performed that corrected for this possibility by studying adults whose abuse had been documented during childhood. Again substantial rates of amnesia were found. A large body of studies using just about every possible methodological design has consistently confirmed the reality of dissociative memory loss by producing similar results.

Still, “false memory” proponents continue to assert that every study supporting the reality of dissociative memory loss is methodologically flawed. And while a claim of methodological weakness can be applied to any scientific study, the critical point remains that after many years, different researchers using different research designs, over multiple sites, with different samples of subjects, the findings have not changed. Such consistency in results provides strong scientific evidence that dissociative memory loss can occur in traumatized individuals.

Some “false memory” advocates seek to counter the overwhelming scientific research documenting the prevalence of post-traumatic amnesia by performing literature reviews using a “didn’t ask–didn’t tell” approach. Dalenberg, C. C., Recovered Memory and the Daubert Criteria: Recovered Memory as Professionally Tested, Peer Reviewed, and Accepted in the Relevant Scientific Community, 7 *Trauma, Violence & Abuse* 274, 285 (2006). *See e.g.*, Pope, H. G., Hudson, J., Bodkin, J., & Oliva, P., Questionable Validity of “Dissociative Amnesia” in Trauma: Evidence from Prospective Studies, 172 *British Journal of Psychiatry* 210-215 (1998); FSMF Brief at 26, viii-xx in Appendix. Dalenberg notes that this dubious

approach is based on reviewing previously published studies on longitudinal reactions to trauma (often on natural disasters, *none* on childhood sexual abuse) that do not focus on (and often do not mention) traumatic amnesia. In other words, the review includes studies where authors typically do not measure memory for the trauma and do not ask about current or prior memory loss. The fact that these studies do not report that participants spontaneously reported memory loss, is then construed as evidence that no one in the study suffered any amnesia.

Beyond the obvious methodological problems with the samples studied (e.g., the inclusion of studies on earthquakes or hurricanes in which, unlike sexual abuse, there is visual evidence, consensual discussion, and public attention), there is a clear problem in the inference of lack of memory impairment when memory impairment was never measured.

Dalenberg notes that “the equivalent pseudoscientific argument on the physical effects of the hurricane would be as follows:

- Participants in Study A were asked about damage to their homes in a hurricane.
- They were not asked about damage to their cars.
- No one spontaneously mentioned their cars in the interview about their homes.
- Therefore, it is impossible for hurricanes to damage cars.”

Dalenberg, *supra* at 285.¹¹

“False memory” advocates also seek to counter evidence for dissociative amnesia found in population surveys by pointing to a lack of controlled experimental evidence showing that the mind is capable of forgetting and then recovering traumatic memories of childhood sexual abuse. For example in its brief before this Court, the FMSF makes much of the fact that there is “no controlled experimental evidence to support the authenticity of such

¹¹ The FMSF Brief defends Pope et al.’s research saying, that while it is true that the people in the studies were not specifically evaluated for “repressed memory”, “...if ‘repressed memory’ were a genuine phenomenon, one would surely find at least a passing remark that one of the researchers encountered...” FMSF Brief at 27 fn46.

memories.” FMSF Brief at 46. This assertion, at first blush impressive, is intended to fool the naive reader who does not realize that traumatic “repression” cannot be directly studied in a laboratory. Research of this nature would require investigators to actually traumatize human subjects under controlled conditions, which would be highly unethical and therefore never permitted by an investigational review board. Far less likely, then, would be a laboratory experiment involving the sexual molestation of a child by a primary caregiver to measure whether the victimized child endured memory loss.¹²

Likewise, researchers cannot ethically induce Alzheimers disease in healthy patients to study the ways this brain disease occurs. And yet, as with dissociative memory loss, though scientists barely understand the mechanics of Alzheimers disease, it cannot reasonably be doubted that the affliction exists and has effects on memory. Indeed, the effect of Alzheimers on memory been proven through the same types of research and scientific studies that, as with abuse victims, depend largely on the self-reports of patients.

In sum, evidence for traumatic amnesia is supported by a wealth of science conducted in carefully controlled laboratory settings. And while scientists cannot traumatize test subjects to measure reactions in a laboratory, ample evidence exists that the brain is capable of avoiding conscious recall of traumatic information. For example, a study published in the prestigious journal *Nature* demonstrated that people have executive control processes that can prevent unwanted declarative memories from entering conscious awareness. Anderson, M. C., & Green, C., Suppressing Unwanted Memories by Executive Control, 410 *Nature* 366-369 (2001, March 15). *See also*, Davis, P. J. Repression and the Inaccessibility of Affective

¹² But see comments by FMSF advisory board member Hollida Wakefield in a journal that advocates for pedophiles. Wakefield, Interview: Hollida Wakefield and Ralph Underwager, 3 *Paidika: J. Paedophilia* 12 (1993) (“It would be nice if someone could get some kind of big research grant to do a longitudinal study of let’s say, a hundred twelve-year-old boys in relationships with loving paedophiles”).

Memories. 52 *J. Personality & Soc. Psychol.* 585-93 (1987). (reviews laboratory research demonstrating that some individuals display limited accessibility to personal, real-life affective memories. The effect is particularly pronounced for threatening experiences involving fear or embarrassment.)

In another controlled laboratory study, researchers found that distinctive, emotionally charged materials were particularly susceptible to memory avoidance. Researchers found that powerful memory-inhibiting effects can occur when participants have no intention to forget and the materials involved are distinctive, emotional materials with sexual and violent content. This type of memory avoidance was reversible with appropriate cues. Smith, S. M., & Moynan, S. C., Forgetting and Recovering the Unforgettable, 19 *Psychological Science* 462-468 (2008).

Another study examined thought suppression in women who reported recovering memories of childhood sexual abuse. Women with spontaneously recovered memories were compared to three other groups: those who always remembered having been sexually abused, those reporting never having been sexually abused, and those who recovered memories of childhood sexual abuse in therapy. Investigators employed a thought suppression paradigm, with autobiographical experiences as target thoughts. Results showed that people reporting spontaneously recovered memories were superior in suppressing anxious autobiographical thoughts, both in the short term and long term (7 days), relative to the other groups. Geraerts, E., McNally, R. J., Jelicic, M., et al., Linking Thought Suppression and Recovered Memories of Childhood Sexual Abuse, 16 *Memory* 22-8 (2008). *See also*, Geraerts, E., & McNally, R. J. Forgetting Unwanted Memories: Directed Forgetting and Thought Suppression Methods. 127 *Acta. Psychol. (Amst)* 614-22 (2008) (reviewing recent research on suppressing disturbing

autobiographical memories which suggests that people who report spontaneously recalling childhood abuse outside of psychotherapy may, indeed, possess skills for not thinking about disturbing material).

Researchers are also beginning to study dissociative amnesia with sophisticated neuroimaging equipment. A recent study shows persuasive evidence that dissociative amnesia is associated with an altered pattern of neural activity which reverses with memory recovery. Kikuchi, H., Fujii, T., Abe, N., et al., Memory Repression: Brain Mechanisms Underlying Dissociative Amnesia, *J Cogn Neurosci*. (March 20, 2009) [Epub ahead of print]. The researchers used functional Magnetic Resonance Imaging (fMRI), a type of specialized MRI scan which measures blood flow patterns to track neural activity in the brain. This specialized scan allowed researchers to investigate brain activity associated with memory retrieval in two patients with dissociative amnesia. For each patient, three categories of face photographs and three categories of people's names corresponding to the photographs were prepared: those of "recognizable" high school friends who were acquainted with and recognizable to the patients, those of "unrecognizable" colleagues who were actually acquainted with but unrecognizable to the patients due to their memory impairments, and controls whose faces were not known to the patients. During fMRI, the patients were visually presented with these faces and asked to indicate whether they were personally acquainted with them. The patients showed different brain activity during presentation of the unrecognizable faces with the recognizable faces. (There was increased activity in the prefrontal cortex [pFC] and decreased activity in the hippocampus in both patients when unrecognizable faces were presented as compared to recognizable faces). After treatment for retrograde amnesia, the altered pattern of brain activation disappeared in one patient whose previously inaccessible memories were

recovered, whereas it remained unchanged in the other patient whose memories were not recovered. The researchers concluded, “Our findings provide direct evidence that memory repression in dissociative amnesia is associated with an altered pattern of neural activity, and they suggest the possibility that the pFC has an important role in inhibiting the activity of the hippocampus in memory repression.” *Id.* This study is particularly important as it provides significant biological proof of the existence of dissociative amnesia, thereby taking the debate out of the realm of pure psychological theory.

In summary, numerous studies looking at whether the brain can suffer dissociative memory loss regarding childhood sexual abuse have found that some sub-group within the sample reported either full or partial substantial forgetting for the events. No study that has specifically examined for evidence of memory loss in traumatized population samples has failed to sustain this finding, which has been confirmed by neuroimaging research and laboratory studies that show how people are able to suppress other types of unwanted information from entering their conscious mind. Simply put, the science is clear and overwhelming that dissociative amnesia is a recognized reaction to childhood sexual abuse and other traumas.

Despite all this research, the FMSF Brief states, “comprehensive reviews of the literature to support the *theory of repression* reveal that, as yet, there is no controlled experimental evidence to support the authenticity of such memories or to confirm their very existence.” (emphasis added) FMSF Brief at 45-46. Parallel to the situation here, the cigarette manufacturers had a Scientific Advisory Board which for years criticized every study that linked cigarettes to cancer as fatally flawed. The Board vigorously defended its position that there was “no proof that cigarette smoking is one of the causes [of cancer]” Cummings, K.,

Morley, C., & Hyland, A., Failed Promises of the Cigarette Industry and Its Effect on Consumer Misperceptions About the Health Risks of Smoking, 11 *Tobacco Control* 110, 115 (2002). As with tobacco industry advocates, it may be the case that no amount of evidence will satisfy “false memory” advocates.

It is important to emphasize that dissociative memory loss had been documented without controversy for over a hundred years as a recognized response to trauma. The idea became controversial only in the 1980s and 1990s when courts began to consider the tolling of statutory limitation periods in child sexual abuse cases. This controversy arose primarily in response to the need for a legal strategy to defend accused molesters. Dalenberg, *Trauma, Violence & Abuse, supra*, at 277. The False Memory Syndrome Foundation was started in 1992 as an advocacy organization for people accused of child sexual abuse and has been instrumental in both creating and maintaining the “false memory” controversy. Stanton, M. U-Turn on Memory Lane, *Columbia Journalism Review* 44-9 (July/Aug. 1997).¹³ The Foundation, which identified media coverage as one of its most important objectives, was successful in shifting more than 50% of the coverage of sexual abuse to alleged false claims. Beckett, K. Culture and the Politics of Signification: The Case of Child Sexual Abuse, 43 *Social Problems* 57-75 (1996); See also, Stanton, *supra*.

¹³ Mike Stanton, who shared a 1994 Pulitzer Prize for investigative reporting, spent a year studying the recovered memory controversy. Stanton found that the press has neglected to examine the motivations of the False Memory Syndrome Foundation and have relied heavily on “FMSF experts and propaganda” for their information on the repressed memory controversy. In a 1997 article, published in the *Columbia Journalism Review*, Stanton stated the following about the False Memory Syndrome Foundation: “Rarely has such strange and little-understood organization had such a profound effect on media coverage of such a controversial matter. The foundation is an aggressive, well-financed P.R. machine adept at manipulating the press, harassing its critics, and mobilizing a diverse army of psychiatrists, outspoken academics, expert defense witnesses, litigious lawyers, Freud bashers, critics of psychotherapy, and devastated parents. With a budget of \$750,000 a year from members and outside supporters, the foundation’s reach far exceeds its actual membership of about 3,000.” Stanton, *supra*, at 44-45.

As John Briere, a leading researcher in the field of trauma, noted, if the debate over delayed memories of adult survivors of child sexual abuse is scientific, it can be addressed by the application of good data. However, if it is political, no amount of data will resolve the controversy. Briere, J., *Science Versus Politics in the Delayed Memory Debate: A Commentary*, 23 *Counseling Psychologist* 290-93 (1995). Briere considers the controversy surrounding dissociative amnesia to be more political than scientific because valid research is being ignored in law and society, and because despite a lack scientific data confirming the existence of “false memory syndrome,” the denials of people accused of child sex abuse are often taken more seriously than the reports of those who claim to be victims.

C. Research Indicates that Recovered Memories and Continuous Memories are of Equal Accuracy

The reliability of the information recalled after a period of forgetting has been documented in a number of carefully performed studies. These studies have found that, when subjected to independent corroboration, continuous memories and spontaneously recovered memories (like those recovered by the plaintiff in the current case) are of similar accuracy.

For example, as noted previously, Williams studied amnesia and memory recovery in a prospective study of adults whose childhood abuse was documented in hospital records. Williams, J. *Traumatic Stress, supra*. To evaluate the accuracy of the memories of sexual abuse, Williams compared the recollections obtained at the follow-up interview with the original medical records. Williams found that, “In general, the women with recovered memories had no more inconsistencies in their accounts than did the women who had always remembered.” *Id.* at 660. Further, “their retrospective reports were remarkably consistent with what had been reported in the 1970s.” *Id.* at 662. Williams found that “the stories were in large part true to the basic elements.” *Id.* at 670. More specifically, Williams compared nine

descriptive features of the abuse from the hospital record to accounts 17 years later and found a mean of 2.00 inconsistencies in the recovered memory group (78% accuracy). *Id.* at 662.

Only common dating errors and errors of minor detail were found. Williams concluded that:

...this study does suggest that recovered memories of child sexual abuse reported by adults can be quite consistent with contemporaneous documentation of the abuse and should not be summarily dismissed by therapists, family members, judges, or the women themselves. *Id.* at 670.¹⁴

Ghetti et al., *supra*, performed a similar prospective study of adults with documented histories of childhood sexual abuse. Like Williams, Ghetti et al. found that objective memory for details of the abuse did not significantly differ between those who reported complete forgetting of abuse and those who did not. Moreover, individuals who suffered more severe abuse actually had more accurate long-term memories for childhood sexual incidents.

In another study, Elke Geraerts, a postdoctoral fellow at Harvard University, examined the validity of recovered memories by attempting to corroborate the memories through outside sources. Geraerts, E., Schooler, J.W., Merckelbach, H., et al., *The Reality of Recovered Memories: Corroborating Continuous and Discontinuous Memories of Childhood Sexual Abuse*, 18 *Psychological Science* 564-568 (2007). The investigators recruited a sample of people who reported being sexually abused as children and divided them based on how they remembered the event. The memories were categorized as either “spontaneously recovered” (the participant spontaneously recalled the abuse outside of therapy, without any prompting), “recovered in therapy” (the participant recovered the abuse during therapy,

¹⁴ Even Elizabeth Loftus, outspoken advocate for defendants in cases involving traumatic memories, has opined that the Williams study validates the experience of child sexual abuse victims who report an inability to recall memories of the abuse until years after the abuse has ended. Bass, A., *Study Finds Traumatic Memories Can Be Recovered*, *The Boston Globe* (January 26, 1995).

prompted by suggestion), or “continuous” (the participant had always been able to recall the abuse). *Id.*

Once all of the information was gathered, interviewers, who were blind to the type of abuse memory, queried other people who could confirm or refute the abuse events (e.g., other people who heard about the abuse soon after it occurred, other people who reported also having been abused by the same perpetrator, or people who admitted having committed the abuse him/herself). The results, published in the *Psychological Science*, a peer reviewed journal of the Association for Psychological Science, showed that, overall, spontaneously recovered memories were corroborated about as often (37% of the time) as continuous memories (45%). Moreover, as Table 1 (adapted from Table 1 in the article) shows, the type of corroboration did not differ between these two groups. The researchers concluded that abuse memories that are spontaneously recovered may indeed be just as accurate as memories that have persisted since the time the incident took place.¹⁵

Table 1: Percentage of Corroborated Continuous Memories and Discontinuous Memories by Each of the Three Criteria¹⁶

Memory type	Type of corroborative information		
	Individuals abused by the same perpetrator	Individuals who learned of the abuse soon after it occurred	Perpetrator confessed
Continuous	53%	31%	16%
Recovered outside of therapy	60%	27%	13%

¹⁵ Memories recovered in therapy could not be corroborated at all. Although the absence of confirmation does not imply that the memory is false, it does suggest that caution should be applied if memories are not recovered spontaneously.

¹⁶ Adapted from Geraerts, *supra* at 566.

While the abovementioned studies addressed the accuracy of recovered memory in general, Dalenberg compared the accuracy of continuous and recovered memory within the same subjects. Dalenberg, C., Accuracy, Timing and Circumstances of Disclosure in Therapy of Recovered and Continuous Memories of Abuse, 24 *J. Psychiatry & L.* 229 (1996). The accuracy of recovered memories and continuous memories of incest survivors were evaluated through the collection of physical evidence of the abuse and by interviewing family members, including alleged perpetrators. Alleged perpetrators used similar methods to collect evidence that supported their own positions. *Id.* at 240-45. The overall evidence for each memory unit was then evaluated by a team of six independent raters, much akin to the way a jury decides cases based on the totality of the evidence at hand. *Id.* at 244-45. About 75% of both the recovered and continuous memories were judged by the raters as either very convincing or reasonably certain. *Id.* at 245. In other words, the accuracy ratings of the continuous memories and the recovered memories again were similar.

Herman and Harvey reported similar findings in their study of 77 adult psychiatric outpatients reporting memories of childhood trauma. Herman & Harvey, *supra*. Patients with and without delayed recall did not differ significantly in the proportions reporting corroboration of their memories from other sources. *Id.*

PTSD associated with continuous and recovered memories has also been evaluated and found to be comparable, and magnitudes of physiologic responses (i.e., heart rate, skin conductance, and electromyograms) during personal abuse imagery has not been found to differ between those who recovered memories and those who had continuous memories. Orr, S. P., Lasko, N. B., Metzger, L. J., et al., Psychophysiologic Assessment of PTSD in Adult

Females Sexually Abused During Childhood, 821 *Ann. of the N. Y. Acad. of Sciences*, 491-493 (1997).

A number of case studies have also reported corroborative evidence for individuals who recovered apparently long-forgotten memories of abuse. In several cases there is both documented evidence of trauma, evidence of amnesia for the memory, and evidence of recovery of an accurate memory. The first case, “Laura” participated in a prospective longitudinal large-scale study of children followed closely from birth to adulthood which was not focused on memory for trauma. Duggal, S., & Sroufe, L. A., Recovered Memory of Childhood Sexual Trauma: A Documented Case from a Longitudinal Study, 11 *J. of Traumatic Stress* 301-321 (1998). Partial recall of the memory returned in the school office while talking with a trusted teacher about her father’s drinking. The memory was corroborated by historical records of a therapist who worked with the family when the subject was 4 years old. The memory was not suggested by a therapist and there were no apparent rewards for remembering the abuse which created a great deal of pain and confusion for Laura, especially concerning her feelings about her father. *Id.*

Another heavily documented case involves the recovery of a traumatic memory by a 17-year-old victim of documented child sexual abuse. Corwin, D. L., & Olafson, E., Videotaped Discovery of a Reportedly Unrecallable Memory of Child Sexual Abuse: Comparison With a Childhood Interview Videotaped 11 Years Before, 2 *Child Maltreatment* 91-112 (1997). The authors present the history, verbatim transcripts, and behavioral observations of a child’s disclosure of sexual abuse to Dr. David Corwin in 1984 and the spontaneous return of that reportedly unrecallable memory during an interview with Dr. Corwin 11 years later. Both the child’s disclosure at age six and the young woman’s sudden

recall of the abuse at age 17 after several years of reported inability to recall the experience are recorded on videotape. *Id.*

Numerous other corroborated cases are also reported in the literature. *See* Cheit, R., Consider This, Skeptics of Recovered Memory, 8 *Ethics & Behav.* 141-160 (1998) (documenting numerous cases of recovered memories verified by compelling corroboration); Bull, D., A Verified Case of Recovered Memories of Sexual Abuse, 53 *Am. J. of Psychotherapy* 221-224 (1999) (documenting a 40-year-old who recovered memories of childhood sexual abuse by her father after receiving a call from her youth pastor in whom she had confided as an adolescent. The memory was corroborated by her sister). *See also*, Schooler, J. W., Ambadar, Z., & Bendiksen, M. A., A Cognitive Corroborative Case Study Approach for Investigating Discovered Memories of Sexual Abuse, in *Recollections of Trauma: Scientific Evidence and Clinical Practice*, 379-388 (J. D. Read & D. S. Lindsay eds., 1997); Schooler, J. W., Bendiksen, M. A., & Ambadar, Z., Taking the Middle Line: Can We Accommodate Both Fabricated and Recovered Memories of Sexual Abuse? in *False and Recovered Memories*, 251–292 (M. Conway, ed., 1997); Shobe, K. K., & Schooler, J. W., Discovering Fact and Fiction: Case-Based Analyses of Authentic and Fabricated Memories of Abuse, in *Recovered Memories: Seeking the Middle Ground*, 95-151 (G. M. Davies & T. Dalgleish, eds., 2001).

Moreover, and contrary to claims that recovered memories are primarily the result of suggestive psychotherapy, most recovery of traumatic memories have been found to occur outside of therapy. In Wilsnack, S. C., et al.'s study of over 700 women, less than 2% of women with delayed recall reported remembering the abuse with the help of a therapist or other professional person. The vast majority of memories were recovered spontaneously in

other contexts. Wilsnack, *supra*. In her follow-up of women with documented childhood abuse, Williams found that “the women with recovered memories were somewhat less likely to have received any counseling” compared to abused women who did not report memory recovery. Williams, J. Traumatic Stress, *supra*, at 659. In a study of 90 female inpatients, those who reported recovering memories of abuse generally recalled these experiences while at home, alone, or with family or friends. Although some participants were in treatment at the time, very few were in therapy sessions during their first memory recovery. Suggestion was generally denied as a factor in memory recovery and a majority of participants were able to find strong corroboration of their recovered memories. Chu, J. A., Frey, L.M., et al., Memories of Childhood Abuse: Dissociation, Amnesia, and Corroboration, 156 *Am. J. Psychiatry* 749-55 (1999).

In summary, research confirms that all memory, recovered or continuous, is subject to some distortion; however, data indicates that 70% to 80% of the details of the accounts will be accurate. Others who have reviewed the data have drawn similar conclusions. For example, after reviewing the literature, cognitive psychologists Lindsay and Read concluded:

In our reading, scientific evidence has clear implications . . . there are few grounds to doubt spontaneously recovered memories of common forms of CSA or recovered memories of details of never-forgotten abuse.

Lindsay, D. S., & Read, J. D., “Memory Work” and Recovered Memories of Childhood Sexual Abuse: Scientific Evidence and Public, Professional and Personal Issues, 1 *Psychol., Public Policy & L.* 846, 894 (1995).

Based on an extensive review of all available scientific research, Schefflin and Brown have suggested that if courts require an evidentiary hearing on the issue of whether repressed memories are reliable, then they “must, consistent with the science, hold either that such memories are reliable or that all memory, repressed or otherwise, is unreliable.” Schefflin, A.,

and Brown, D., Repressed Memory or Dissociative Amnesia: What the Science Says, 24 *J. Psychiatry & L.* 143,183 (1996). The trial court in *State v. Walters* appears to agree, stating “[T]here is no evidence that [traumatic memory testimony] is inherently unreliable or even that it is less reliable than the typical memory evidence upon which the courts of this State must rely on a regular basis.” *State v. Walters, supra* at 2.

D. Reliability Can be Demonstrated Through Scientific Standards in Instances When Error Rates Are not Directly Applicable

To support efforts to exclude recovered memory evidence, defendants generally rely on *Daubert v. Merrell Dow Pharmaceuticals, Inc. supra*. See FMSF Brief at 45. However *Daubert’s* application has been awkward in delayed memory cases because of its focus on objectively testable “hard” science. Procedures for evaluating the error rate of a technique generally involve use of the technique (compared to others) in a controlled setting, leading to agreement as to the standards for varying decisions (e.g., the decision on number of ridge comparisons that must be identical in a fingerprint before it is called a match). Dalenberg, Trauma, Violence & Abuse, *supra*, at 300. Consequently, while *Daubert* applies well to the standards and controls (and error rate) for a particular “hard science” evaluative technique (e.g., fingerprinting, blood spatter analysis, psychological testing), it is problematic to use the logic of error rate for a *technique* and apply it to an internal mental *phenomenon* such as memory.

How, for instance, would one establish an error rate for continuous memory? We can show that people do claim to recall their pasts, and we can show that they are often right and sometimes wrong. But the error rate for continuous memory for one’s past depends on thousands of factors (e.g., time since the event, knowledge of the alleged perpetrator, duration of the assault, reality testing capacity of the accuser, physical disabilities [e.g., eyesight] of the

accuser, age of the accuser, etc.). *Id.* at 300. One cannot reasonably condense these factors into one error rate for memory, whether that memory is continuous or recovered. Proving that an experience happened is typically established through testimony and the matching of testimony and behavior through external evidence. Discriminating between veridical and mistaken memories is a question to be answered by the fact-finder based on a totality of the evidence, and can be informed, but not ultimately answered by science.

The United States Supreme Court recognized the difference between the “hard” sciences and the social sciences in a follow-up case to *Daubert*. In *Kumho Tire Company, Ltd. v. Carmichael*, 526 U.S. 137, 119 S.Ct. 1167, 143 L.Ed.2d (1999), the court in effect provided a legal answer to concerns about error rates:

This case requires us to decide how *Daubert* applies to the testimony of engineers and other experts who are not scientists. We conclude that *Daubert*'s general holding--setting forth the trial judge's general 'gatekeeping' obligation--applies not only to testimony based on 'scientific' knowledge, but also to testimony based on “technical” and ‘other specialized’ knowledge. See Fed. Rule Evid. 702. We also conclude that a trial court may consider one or more of the more specific factors that *Daubert* mentioned when doing so will help determine that testimony's reliability. But, as the Court stated in *Daubert*, the test of reliability is “flexible,” and *Daubert*'s list of specific factors neither necessarily nor exclusively applies to all experts or in every case. Rather, the law grants a district court the same broad latitude when it decides how to determine reliability as it enjoys in respect to its ultimate reliability determination.

Id. at 141-142. Thus, the court held that *Daubert*'s list of specific factors neither necessarily nor exclusively applies to all experts or in every case. This Court has similarly interpreted the *Lanigan* test of reliability such that all five factors are not necessary to determine requisite reliability. See e.g., *Commonwealth v. Powell*, *supra* at 139-140.

Moreover, the court in *Kumho* noted that the focus should be on the “expert's particular method of analyzing the data obtained to draw a conclusion regarding *the particular matter to which the expert testimony was directly relevant...*” *Kumho*, *supra* at 154

[emphasis in the original]. Basing an opinion on data derived from the scientific method – a method expressly developed to insure the validity and reliability of research findings, and which allows for the calculation of error rates via significance testing, -- should satisfy the requirement for known or potential error rates regarding testimony on a scientific theory or process. For example, replication of studies across different populations and obtaining similar results is considered one of the hallmarks of reliability and generalizability in science. Thus as set forth above, the fact that a number of different studies using different investigators, samples and methods have found recovered memory to be as reliable as continuous memory is strong support that this conclusion carries a high degree of scientific certainty.

In the alternative, error rates can be applied to scientific *studies*. For example, error rates are addressed in scientific studies through the use of appropriate control groups, significance testing and/or by calculating confidence intervals. Dalenberg points out that at the .05 significance level or better, dozens of reviewed studies have established that:

- A. “Motivated avoidance of a memory can reduce accessibility of that memory.
- B. Differences in brain states (e.g., fear vs. nonfear states) can influence accessibility of a memory.
- C. Avoidance of emotion associated with painful experiences can both harm memory for that experience and lead to increased levels of painful affect.”

Dalenberg, *Trauma, Violence & Abuse*, *supra*, at 301. Basing opinions on studies that employ appropriate standards and controls to insure accuracy of the results should the reliability requirements of both *Daubert* and *Lanigan*.

In summary, the *Daubert* test of reliability is “flexible,” and *Daubert*’s list of specific factors neither necessarily nor exclusively applies the same way to all experts or in every case. In testimony dealing with “soft” sciences such as psychology, *Daubert*’s requirements can be fulfilled when an otherwise qualified expert’s opinion is backed by data that adheres to appropriate scientific standards for determining reliability.

E. The Issue of "Repression" is Immaterial to the Legal Issues in This Case.

Some label the phenomenon of "dissociative memory loss" – a process whereby the mind avoids conscious acknowledgment of traumatic experiences – as *dissociative amnesia*. Others use terms such as *repression*, *dissociative state*, *traumatic amnesia*, *psychogenic shock*, or *motivated forgetting*. Semantics aside, there is near-universal scientific acceptance of the fact that the mind is capable of avoiding conscious recall of traumatic experiences and of recovering memory of these experiences at a later time.

As noted previously, the term "dissociative amnesia" appears as follows in section 300.12 of the DSM-IV:

Dissociative amnesia is characterized by an inability to recall important personal information, usually of a traumatic or stressful nature, that is too extensive to be explained by ordinary forgetfulness.

Three points are important about this definition. First, it demonstrates that the concept of recovered memory is generally accepted in the relevant scientific community. Second, the definition provides a mechanism to distinguish dissociative amnesia from ordinary forgetting. And third, the definition focuses on the functional aspect of the behavioral experience, *not* on the semantic issue of defining repression or dissociation, or on the theoretical model that accounts for the behavior. In other words, *dissociative amnesia* is a condition; *repression* is merely one of the mechanisms that may be responsible for the condition.

There is currently no scientific consensus regarding the question of how a "forgotten" memory can be later "recovered." A number of yet unproven mechanisms have been proposed to explain how traumatic memories are "forgotten." The following is a list of some of the proposed explanatory mechanisms for recovered memories mentioned by the International Society for Traumatic Stress Studies:

Dissociation: an altered cognitive state which sometimes occurs during a traumatic event and which may interfere with the normal processes for remembering (encoding, consolidation or retrieval) of such events.

Repression: a theoretical psychological process hypothesized to actively prevent conscious retrieval of memories.

Conditioned extinction: a laboratory phenomenon by which certain conditions can activate inhibition (or reduce the availability) of previously learned behavior.

State dependent learning: a mechanism that would explain why traumatic memories can be retrieved only when the individual is in the same emotional, environmental and neurobiological state that was present during the original traumatic event.

International Society for Traumatic Stress Studies, *supra* at 13.

Much of the FMSF Brief centers on critiques of “repression” narrowly defining the term as a mental mechanism. Because repression as a specific mental mechanism remains unproven, the FMSF suggests that traumatic memory loss as a phenomenon is also unproven.

No empirical data support the assumed prevalence of *repression* as a common response to trauma, the mechanism by which *repression* is posited to operate, or even the concept of *repression* itself. Indeed, unless *repression* is shown to actually exist, discussing its prevalence or its possible mental mechanisms is premature or even irrelevant. (emphasis added) FMSF Brief, at 17-18.

An attempt to discredit delayed recall of abuse memories in general through a focus on one proposed theory for the phenomenon sets up a “straw man” argument, distracting from the overwhelming weight of scientific evidence regarding recovered memories of sexual abuse overall.¹⁷ The Statement on Memories of Sexual Abuse issued by the American Psychiatric Association clearly states that a variety of mechanisms may account for delayed recall:

¹⁷ In *State v. Walters*, the judge noted:

. . . even Dr. Loftus conceded upon cross-examination that the APA policy which she helped to create notes that “it is possible for memories of abuse that have been forgotten for a long time to be remembered . . .” The language of the APA report indicates that the challenge to recovered memories which is included therein concerns the mechanism by which the delayed recall occurs, rather than the fact of its occurrence . . . Furthermore, Dr. Loftus acknowledged that dissociation from a traumatic event is a recognized phenomenon. *State v. Walters, supra*, at 22-24.

...children and adolescents who have been abused cope with the trauma by using a *variety of psychological mechanisms*. In some instances, these supporting mechanisms result in a lack of conscious awareness of the abuse for varying periods of time. Conscious thoughts and feelings stemming from the abuse may emerge at a later date. (emphasis added).

American Psychiatric Association, Statement of Memories of Sexual Abuse, 42 *International Journal of Clinical and Experimental Hypnosis*, 261, 262 (1993).

Moreover, most of the literature on memory problems and sexual abuse is not really focused on the concept of “repression” at all.

[almost] none of the researchers who have conducted the surveys on amnesia for childhood sexual abuse, with the exception of the original Herrnan and Schatzow (1987) report, provides a discussion of the mechanism by which the amnesia for childhood sexual abuse occurs. Most clinicians would say that amnesia for childhood sexual abuse can be caused by a variety of mechanisms, repression being only one.

Brown et al., Memory, Trauma, Treatment and the Law, *supra*, at 392. Some scholars have suggested that repression is best understood as “a general representation” for any number of cognitive mechanisms that interact with trauma to render memory inaccessible. Reviere, S. L., *Memory of Childhood Trauma: A Clinicians Guide to the Literature* (New York: Guilford Press, 1996).

The fact that the mental mechanisms that account for delayed memory are not yet understood is not surprising. Scientists have yet to understand, much less agree on, how *normal* memories for ordinary events are formed, stored, or retrieved. Dozens of theoretical frameworks are currently being studied. *See e.g.*, Tulving, E., and Craik, F. I. M., *The Oxford Handbook of Memory* 620 (Oxford University Press, 2005) (noting “We are far from understanding the relation between consciousness and memory.”); Linden, D. E., The Working Memory Networks of the Human Brain, 13 *Neuroscientist* 257-67 (2007) (highlighting open questions about working memory, such as the mechanisms for integrating different types of content or those providing the link to long-term memory). No one would

mistake the fact that scientists disagree about how normal memories are formed and retrieved for evidence that memory cannot therefore exist.

A number of scientists and academic commentators have pointed out the serious error in reasoning by which false-memory advocates have conflated lack of evidence regarding one mechanism for forgetting with evidence that forgetting occurs at all. Gleaves noted,

An analogy with another clinical phenomenon illustrates the nature of [this] problem. There are numerous proposed underlying mechanisms for depression, including learned helplessness..., low response-contingent positive reinforcement..., and negativistic cognitive schema..., etc. Examination of these possible underlying mechanisms would not allow one to draw conclusions about the existence of depression.

Gleaves, *supra*, at 1. *see also*, Brown et al., *Memory, Trauma, Treatment and the Law*, *supra*, at 392. In other words, we would not deny the existence of depression just because some doubt had been cast on one of the many theorized psychological mechanisms for causing depression.

Debates over the mechanism by which people avoid conscious recall of trauma are, understandably, of interest to psychologists; but they are irrelevant in legal cases where the primary question is whether some kind of forgetting occurred. In other words, the law is concerned, not with how the brain does what it does, but rather, whether the brain can do it.

Karon and Widener, for instance, write,

In January of 1998, a rape victim whose initial treatment had not been helpful was seen for consultation and referral (to more helpful treatment, it was hoped). She reported having been raped by a man she admired and trusted. She reported initially remembering all the events that occurred the day of the rape, both before and after the rape, but not the rape itself. Rather, for a week after the rape, although she did have symptoms of distress, she did not remember being raped and got angry at anyone who made negative statements about the perpetrator. When she finally remembered the rape, she reported it, and the perpetrator later admitted the crime. Would any serious clinician tell her she is lying because there is no such thing as *repression*? (emphasis added)

Karon, B., & Widener, A., *Repressed Memories: The Real Story*, 29 *Professional*

Psychology: Research and Practice 482 (1998).

In sum, this Court should reject any attempt to dismiss the considerable research on dissociative memory loss by viewing the issue because of disagreement over whether the mechanism by which it occurs should be referred to as “repression.” This misleading, largely semantic, controversy conflates scientific debate over the word used to describe a possible explanation for the brain’s dissociative capacity, with a wealth of scientific agreement that the phenomenon occurs – no matter what it’s called – and no matter how it happens.

F. The Law in State and Federal Courts Overwhelmingly Recognizes the Validity of “Dissociative Memory Loss and Recovered Memory”

Testimony based on dissociative amnesia has gained widespread acceptance in courts across the United States. Many state and federal courts have addressed the reliability of delayed memory and related issues involving the statute of limitations. The majority of reported cases directly addressing this issue recognize the existence of the phenomenon of dissociative/traumatic amnesia and the related experience of delayed recovery of traumatic memories. *See* Gothard, S., & Ivker, N. A. C., The Evolving Law of Alleged Delayed Memories of Childhood Sexual Abuse, 5 *Child Maltreatment* 176-189 (2000).

For example, the Florida Supreme Court permitted a cause of action based on repressed memories (traumatic amnesia) to go forward ruling that “Numerous courts around the country apply the delayed discovery doctrine to cases alleging childhood sexual abuse followed by a temporary loss of memory.... Application of the doctrine to such cases constitutes both the majority rule and the modern trend in American jurisprudence.”

Hearndon v. Graham, 767 So.2d 1179 (Fla. 2000).

In what appears to be the most recent judicial appraisal on the subject (April 7, 2009), the trial judge made the following ruling:

Plaintiff claims that he repressed memories of abuse that occurred over 50 fifty years ago. He intends to introduce testimony from Dr. Tavani to support his position. The Court is satisfied that the concept of repressed memory/traumatic amnesia is generally accepted in psychiatry and its existence is set out in the DSM-IV-TR. The error rate of false memories is within the normal scientific margin of error. The Court is satisfied that sufficient medical and scientific support exists for the admission of testimony regarding repressed memory/traumatic amnesia under D.R.E. 702 and *Daubert*.

McClure v. Catholic Diocese of Wilimington, Inc., C.A. No. 06C-12-235 CLS (Del.Super.Ct. April 7, 2009). This ruling was issued after testimony from Dr. Loftus. *Id.* at 2.

In Texas, the Supreme Court implicitly upheld the applicability of the discovery rule to toll the statute of limitations in certain delayed memory cases, thus acknowledging the existence of the phenomenon of recovered memories and recognizing that dissociative/traumatic amnesia can render the memories of child sexual abuse “inherently undiscoverable.” *S.V. v. R.V.*, 39 Tex. Sup. Ct. J. 386, 933 S.W.2d 1 (1996).

In a California case, *Evans v. Eckelman*, 216 Cal.App.3d 1609, 265 Cal.Rptr. 605 (1st Dist. 1990), the court held: “It has been widely recognized that the shock and confusion engendered by parental molestation, together with the parent’s demands for secrecy, may lead a child to deny or block the traumatic events from conscious memory....” *See also, Trear v. Sills*, 69 Cal.App.4th 1341, 82 Cal.Rptr.2d 281 (4th Dist. 1999) (holding that, “The debate concerning repressed memory of childhood sexual abuse has been ongoing for at least the last 100 years....To the degree that the California Legislature has taken sides in the debate, it has explicitly recognized the possibility that there will be genuine cases of recovered memory of childhood sexual abuse...”)

The Supreme Court of Arizona noted: “Memory repression, also referred to as selective amnesia, traumatic amnesia, and dissociative amnesia, has been documented in various contexts among persons who have survived severe trauma, including concentration camp survivors, combat veterans, and victims of childhood abuse.... From a review of the

literature, we must conclude that repressed memories of childhood abuse can exist and can be triggered and recovered.” *Doe v. Roe*, 191 Ariz. 313, 955 P.2d 951 (1998). The court further held that dissociative amnesia arising out of childhood sexual abuse, may trigger the state’s discovery and “unsound mind” doctrines thereby tolling the statute of limitations. *Id.*

As for the reliability of expert testimony regarding the phenomenon of dissociative/traumatic amnesia and recovered memories, several courts have upheld the admissibility of such testimony after concluding that the phenomenon is valid and has gained general acceptance in the relevant scientific community. See e.g., *Isley v. Capuchin Province*, 877 F.Supp. 1055 (E.D. Mich. 1995); *Shazade v. Gregory*, 923 F.Supp. 286 (D.Mass. 1996).

In *Shahzade*, a federal judge construing Massachusetts law was asked by the defendant to exclude all testimony on repressed memory. After conducting a *Daubert* hearing during which various experts testified, the judge reached the following conclusion:

...the Court finds that the plaintiff has satisfied the four foundational factors which are to be considered, although not independently determinative, in order to introduce evidence relating to repressed memories. The plaintiff has presented sufficient evidence...that (1) the theory has been the subject of various tests; (2) the theory has been subjected to peer review and publication; (3) that repressed memory, as is true with ordinary memories, cannot be tested empirically, and may not always be accurate, however, the *theory* itself has been established to be valid through various studies...; and (4) the theory has attained general acceptance within the relevant scientific community, namely, that of clinical psychiatrists. (emphasis in original)

This ruling correctly pointed out that the American Psychiatric Association recognizes the “theory of repressed memories and believes it to be very common among people who have experienced severe trauma.” He found persuasive the testimony of Dr. Bessel van der Kolk, who observed that “the majority of clinical psychiatrists recognize the theory of repressed memories and do not find the theory itself controversial.” *Id.* at 288. The judge noted that Dr. Van der Kolk “further stated that this is not ‘a new craze among American psychiatrists... this

is a very old issue in psychiatry.’ The issue only became controversial when studies on the issue of repressed memories of sexual abuse, as opposed to repressed memories of natural traumatic events or wartime incidents, began to surface.” (emphasis in original) *Id.*

In a more recent ruling, the New Jersey Supreme Court unanimously held that a cause of action based on spontaneously recovered repressed memories does not require expert testimony about the manner in which the memories returned. *Phillips v. Gelpke*, 190 N.J. 580, 921 A.2d 1067 (2007). Phillips, at age 19, sued Gelpke claiming he sexually abused her when she was between the ages of three and eight. She claimed she repressed memories of the incidents until memories of abuse returned several years later episodically in flashbacks. None of her recollection was the product of therapy or counseling. The court held that expert testimony was not necessary, as hers was not a case in which jury was being asked to assess the validity of a memory prodded by any third-party method of memory stimulation that might require explanation to assist a fact-finder. Instead, the court held that the plaintiff’s ability to recall the abuse and when she actually recalled the abuse went to the weight of her testimony. *But see, Barrett v. Hyldborg*, 127 N.C.App. 95, 487 S.E.2d 803 (1997) (affirming trial court decision that plaintiff could not proceed with evidence of alleged repressed memories of childhood sexual abuse occurring over forty years prior without expert testimony about memory repression).

The Massachusetts Legislature has enacted legislation effectively recognizing the existence of dissociative amnesia and the presumptive reliability of recovered memories of childhood sexual abuse. Mass. Gen. Law. Ann. ch. 260, § 4C (West Supp. 1995). This legislation is in keeping with the trend among the states that have enacted or amended legislation since the mid-1980s to extend the limitation period in recovered memory cases.

In addition, numerous courts have liberally applied the discovery rule to toll the statute of limitations in cases in which the plaintiff did not discover injuries and/or the causal relationship between those injuries and prior abuse until years after the abuse ended, even where the legislature has not enacted such a tolling provision. *See e.g., Farris v. Compton*, 652 A.2d 49 (D.C. 1994) ; *Herald v. Hood*, 1993 WL 277541 (Oh. App. 9 Dist., Summit County, July 21, 1993), appeal dismissed, 639 N.E. 2d 109 (Oh. 1994), cert. denied, 115 S.Ct. 1363 (1995); *McCollum v. D'Arcy*, 638 A.2d 797 (N.H. 1994); *Ault v. Jasko*, 70 Ohio St. 3d 114, 637 N.E. 2d 870 (Ohio Sup. Ct. 1994). Other courts have issued similar rulings, *Phillips v. Johnson*, 231 Ill. App. 3d 890, 599 N.E. 2d 4, 174 Ill. Dec. 458 (Ill. App. 3 Dist., June 29, 1992); *Petersen v. Bruen*, 792 P.2d 18, 106 Nev. 271 (Nev. Sup. Ct., 1990), *Doe v. Redeemer Lutheran Church*, 555 N.W. 2d 325 (Minn. App. 1996); *Sellery v. Cressey*, 48 Cal.App.4th 538, 55 Cal. Rptr.2d 706 (Cal. App. 2 Dist. 1996); *Evans v. Eckelman, supra*; *Marsha v. Gardner*, (1991) 231 Cal.App.3d 265, 281 Cal. Rptr 473); *Fager v. Hundt*, 610 N.E.2d 246 (Ind. 1993); *Leonard v. England*, 445 S.E.2d 50 (N.C. App. 1994); *Isley v. Capuchin Province, supra*; *Franklin v. Duncan*, 844 F.Supp. 1435, 1438 (N.D. Cal. 1995).

Other cases involving delayed memories have proved successful and have been affirmed by appellate courts. *See Hoult v. Hoult*, 57 F.3d 1 (1st Cir. 1995) (plaintiff was abused from age four to age thirteen but did not recall the abuse until eleven years after it ended); *Herald v. Hood*, 1993 WL 277541 (Oh. App.9 Dist., Summit County, July 21, 1993), appeal dismissed, 639 N.E. 2d 109 (Oh. 1994), cert. denied, 115 S.Ct. 1363 (1995) (plaintiff was abused from age three to age fifteen but she did not recall the abuse until fifteen years after it ended); *Van Housen v. Ipsen*, 1992 WL 682159 (T.S. Cal. Jury) (San Mateo Cty. Super. Ct. Cal. 1992) (plaintiff was abused by her coach when she was thirteen years old. She

filed suit fourteen years later when she recalled the abuse).

Although a few cases have been decided that favor the position that recovered memories are unreliable, it is worth noting that in some cases, judges did not receive a full and adversarial analysis of the science. For example, the court in *Kelly v. Marcantonio* received an amicus brief solely on the side of “false memory” proponents. *Kelly v. Marcantonio*, 678 A.2d 873 (R.I. 1996). The brief cited the writings of FMSF Board members (Loftus, Ofshe, Slovenko, and Pope) and the research supporting the contrary position were largely absent. *See Id.* at 873, 879 n.7.

One case frequently cited by the minority who oppose the existence of repressed memory is *Doe v. Maskell*, 342 Md. 684, 679 A.2d 1087 (1996). Relying heavily on testimony by false memory proponents, the Maryland Court of Appeals could find no difference between repression and ordinary forgetting, and therefore concluded, for the purpose of tolling the statute of limitations, that repression does not delay the running of the statute. According to *Doe*: “After reviewing the arguments on both sides of the issue, we are unconvinced that repression exists as a phenomenon separate and apart from the normal process of forgetting. Because we find these two processes to be indistinguishable scientifically, it follows that they should be treated the same legally. Therefore we hold that the mental process of repression of memories of past sexual abuse does not activate the discovery rule.” *Id.* In reaching its conclusion, the court was obviously mistaken because its premise was in error. Dissociative amnesia, the correct scientific name for repressed memory, is defined in section 300.12 of the DSM-IV:

Dissociative amnesia is characterized by an inability to recall important personal information, usually of a traumatic or stressful nature, *that is too extensive to be explained by ordinary forgetfulness.* (emphasis added)

From this definition it is quite clear that repressed memory cannot, as the court holds,

be indistinguishable from normal ordinary forgetting. The two mechanisms are recognized by scientists as being distinct and different, though both involve an inability to recall details or events. To reach its conclusion, therefore, the *Doe* court had to discard the very definition of dissociative memory which requires that it be understood as a unique mental mechanism apart from ordinary forgetting. In short, the court cannot sensibly reject repressed memory or dissociative amnesia by simply considering it to be something other than how it is defined. Of course, the court could conclude as a matter of policy that both ordinary forgetting and repressed memory do not toll the statute of limitations. But it cannot logically conclude as a matter of science that repressed memory does not exist unless it applies a correct understanding of the phenomenon.

Another case frequently cited as ruling against repressed memory actually holds the opposite. In *State v. Hungerford*, 142 N.H. 110, 697 A.2d 916 (1997), the court stated,

We do not mean to suggest that all or even a majority of recovered repressed memories are 'false.' Rather, we merely recognize that the memories are subject to many factors that may affect their reliability, especially, as the trial court found in the instant cases, the uniquely suggestive environment of psychological therapy.

Id. The court thus accepts the scientific existence of repressed memory, but cautions about its admission into evidence when the memories return during or after therapy.

CONCLUSION

The sexual abuse of children is a serious social problem. That it can cause “dissociative memory loss and recovered memory” is beyond scientific dispute. The ability of the human brain to avoid conscious awareness of traumatic events has been documented in the medical literature for more than a hundred years. As noted above, many, many studies have demonstrated the reality of this phenomenon. Most importantly, the DSM-IV, the “gold standard” for professional consensus in the mental health community, has long recognized dissociative memory as a common feature of post-traumatic conditions. Thus, where the state of the science is both long-standing and well-settled, a *Lanigan* hearing should not be required before an otherwise qualified expert can testify to matters involving dissociative memory loss or recovered memory.

The fact that debate exists over *how* the mind suppresses and recalls traumatic information in no way suggests that the phenomenon itself is controversial or in dispute. All memory is, by its very nature, fallible and inaccurate, and scientists do not yet completely understand or agree about how the mind forms, stores, or retrieves ordinary memories, much less traumatic ones. Thus, if Appellant is correct that the test for admissibility is not whether most scientists agree about *whether*, but about *how* the mind works, then all human testimony must be excluded.

The central issue in a judicial proceeding is whether the trier of fact can determine truth – which in a traumatic amnesia case may require a jury to assess, with assistance from expert witnesses if necessary, the different factors that influence human memory. Ultimately, this enables the fact-finder to make the correct decision based on a totality of the evidence; a process that can be informed, but not entirely answered, by science.

It would be ironic in the extreme for the law to deny blameless individuals access to justice because the trauma of abuse rendered them effectively incompetent to testify for a period of time when they had no capacity to recall the abuse. While it is certainly reasonable for this Court to be concerned about the possibility that people may take advantage of judicial respect for the phenomenon of dissociative amnesia by lodging false claims, this fear is speculative and can easily be resolved short of denying an entire category of injured citizens access to justice. Various laws already forbid the filing of false criminal charges, bad faith civil claims, and lies under oath. Moreover, it is widely known that sexual assault and abuse claims are brought infrequently, at best, and despite a decade of support in the law for the delayed filing of sexual abuse cases based on recovered memory, there is simply no evidence that false claims of abuse (delayed or not) are filed more frequently than any other type of civil or criminal action.

Unless this Court finds that *Lanigan* hearings are not required to demonstrate the scientific validity of dissociative memory loss or recovered memory, other cases involving expert testimony regarding psychological trauma, such as PTSD, dissociation and other stress-related disorders that affect memory, cognition, behavior or perception, will likewise be subject to challenge and appeal. In turn, requiring a *Lanigan* hearing on the facts here may provide grounds for new trial motions in cases involving expert testimony on a variety of stress-related disorders in cases that have already been resolved on direct appeal. This decision may even open the door to arguments that *Lanigan* hearings are required in all instances that expert testimony is proffered—even where no substantive scientific dispute exists over the existence of a particular phenomenon or scientific principle—but where competing *explanatory theories* are present (such as depression or PTSD).

For all the above reasons, Amicus respectfully requests that this Court affirm the judgment of the trial court and uphold the admissibility and reliability of testimony related to dissociative amnesia and recovered memories.

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE WITH M.R.A.P. 16 (k)

I hereby certify that this brief complies with the rules of court that pertain to the filing of briefs.

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APPENDICES

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Appendix 2: Surveys of Health Professionals on Existence of Repressed Memories/Dissociative Amnesia

Survey	Sample	Not valid; Doesn't exist (%)	Possibly or somewhat Valid (%)	Valid; Exists (%)
H. G. Pope et al. 1999 n=301	Board Certified Psychiatrists	19	48	23
Danmeyer et al., 1998 n=398	Ph.D Clinicians	13	29	58
	Psy.D. Clinicians	4	25	71
	Social Worker Clinicians	4	36	60
	Experimental Psychologists	25	41	43
Andrews et al., 1995 n= 1083	Clinicians in British Psychological Society	3	53	44
Kamena et al., 1998 n=198	Psychologist Psychiatrists Hypnotherapists	10	26	64
Palm & Gibson, 1998 n=88	Psychologists	10	35	55
K. Pope & Tabachnick, 1995 n=378	Psychologists			[71*]
Polusny & Folette, 1996 n=223	Psychologists			[19**]
Dunn et al. 1994	VA Psychologists and Psychiatrists			98

*71% of psychologists treated a RM case in the past 2 years

**19% of psychologists have seen a RM case in the past year

Appendix 3: Studies Examining Rates of Forgetting of Childhood Sexual Abuse Divided by Sample Type

CLINICAL SAMPLES

<i>Study</i>	<i>CF</i>	<i>PF</i>	<i>F+P</i>	<i>IC</i>	<i>Rx</i>	<i>N/n</i>	<i>Sample</i>
Outpatient Samples:							
*Herman & Schatzow, 1987	28	36	64	74	100	53	outpt Rx
*Briere & Conte, 1993			59			450	outpt tx for CSA
*Cameron, 1994, 1996	42	23	65		100	132	women, CSA tx
*Loftus et al., 1994	19	12	31		100	105	women, drug tx
*Binder, 1994	37	6	43		100	30	women, outpt tx
*Dalenberg, 1996			100			17	women incest survivors in outpt tx
*Gold et al., 1994	30	40	70			105	outpt intake interview
Trowell, 1997	6				100	50	50 girls with CSA histories as part of British psychotherapy outcome study
*Harvey & Herman, 1994; Herman & Harvey, 1998	16	17		43	28	77	chart review of women survivors
*Gold & Hughes, 1996; Gold et al., 1999	29	43		28		160	women survivors in outpt tx
*Koopman et al., 1998	37					32	women seeking tx for CSA (acute stress disorder)
*Rodriquez et al., 1998			56			45	PTSD in outpts with CSA hx
Pomerantz, 1998	50	42	98		100	26	women in outpt Rx
Hewson, 1998	100					20	women with RM via survivor networks
Hunter, 1998	37.5	37.5	75			16	women patients
Hunter, 1998			29			82	men & women

*Ward & Carroll, 1998	45+ 9**					32	Australian survivors, mostly in counseling
Andrews, 1998	56	44		40	100	100	recovered memories in Rx
*Andrews et al., 1999	69	31	100	41	68	690/ 448	Interview of therapists with recovered memory pts
*Orr et al., 1998	24				10	71	physiological assessment of women with CSA
*Dale & Allen, 1998	++30	16.5	46.5	69.5		37	clients & Rxists with CSA Hx
*Hunter & Andrews, 2002	30	27	57		95 32	74	Outpatient women vs. non-abused controls
*Alaggia, 2004			29			24	Survivors who did and did not disclose at time of abuse
*Fivush & Edwards, 2004	50	25			100	12	Women survivors from medical settings
*Crowley, 2007	46.7	33.3	80		100	30	Women in Rx for CSA
Inpatient Samples:							
*Roe & Schwartz, 1996			77	44	68	52	women in inpt tx for CSA
*Chu et al., 1996	24			76	100	75/25	psychiatric inpt with hx PA, CSA
Carlson, 1996; 1998	41 31	21 19	62 50		100	217/ 136;96	inpatients on trauma & general px units
*Chu et al., 1999	34	26	60	89	55	90/74	women inpts
Major Dissociative Disorders Samples:							
*Coons & Milstein, 1986	100 0			85		20/15 DID; 1 non- DID	consecutive DID pts vs. non-DID control pts

Draijer, 1992			57			1,054 164	national survey
Ensink, 1992	29	28	57		100	100	incest & Rx groups (DID)
*Albach et al., 1998			35 1		100	98e 65c	women with Hx of CSA/normal controls
Kluft, 1998	68			56	100	34	DID outpt tx; confirmed abuse
*Coons et al., 1998			96 24		100	50e 25c	consecutive DID pts vs. depressed controls
*Swica et al, 1996	33.3	66.7		100		6	DID in incarcerated inmates
*Lewis et al., 1998	33.3	58	91	91		12	DID inmates
*Bowman & Omkar, 1996	73					45	Non-epileptic seizure pts
*Bowman, 1999	69					58	Non-epileptic seizure pts
*Nijenhuis et al., 2001	62	35	98		100	34	DID pts
*van der Hart et al., 2005	93			68	100	30	DID pts

*signifies peer review journal publication

+general autobiographical memory disturbance in CSA survivors, not about amnesia for CSA per se ("large parts of childhood after age 4 that you can't remember")

++5% subsequently believed to be inaccurate

CF= % complete forgetting; PF= % partial forgetting; F+P= % combined complete & partial forgetting; IC= % sample for which there was some sort of independent corroboration; Rx+ % Ss in therapy; N/n= Total sample size/Ss with history of CSA; Sample= sample description; CSA= childhood sexual abuse

FORENSIC SAMPLES

Study	CF	PF	F+P	IC	Rx	N/n=	Sample
Goodman et al., 1995	4.5	45	50			1,652	ritual abuse allegations
Dorado, 1996	100		100			7	RM plaintiffs
Cheit, 1998	100		100	100		36	corroborated legal cases of recovered memory
*Bidrose & Goodman, 2000	39**			79		4	New Zealand girl victims of sex ring
*Sjoberg & Linblad, 2002			30	100		10	Police interviews 0.5-2 years after child sexual abuse, compared to videotapes of abuse
*Becker-Blease & Freyd, 2007	High dissociation during victimization & perpetration, including blocked out memories				100	12	sex offenders with CSA and pa histories, in mandated tx treatment

**under-reporting rate

CF= % complete forgetting; PF= % partial forgetting; F+P= % combined complete & partial forgetting; IC= % sample for which there was some sort of independent corroboration; Rx+ % Ss in therapy; N/n= Total sample size/Ss with history of CSA; Sample= sample description; CSA= childhood sexual abuse

COMMUNITY (NON-CLINICAL) SAMPLES

<i>Study</i>	<i>CF</i>	<i>PF</i>	<i>F+P</i>	<i>IC</i>	<i>Rx</i>	<i>N/n=</i>	<i>Sample</i>
Bernet et al., 1993	36				30	624/ 129	college undergrads
*Sheiman, 1993	48					196/ 23	college undergrads
Belicki et al., 1994			55			183/ 68	college undergrads
*Kristiansen et al., 1995	25	26	51	61	93	113	community sample of women
Rosencrans, 1997			>85			93	daughters abused by mothers
Whitfield & Stock, 1996	32	36	68	63	3	100	self reported survivors
Whitfield, 1998			71			171	self reported survivors
*Read et al, 1995			31			201	college undergrads
Read, 1998	50					224/ 18	shopping mall subjects
van der Kolk et al., 1993			60			700/ 34	DSM-IV field trial on trauma survivors
*van der Kolk & Fisler, 1995			42+	75		46/29	terrible life experiences
*Roesler & Wind, 1994	28					228	triggered by M. von Durber disclosure
Grassian & Holtzen, 1996	19	28	47			99/ 42	triggered by Father Porter disclosure
*Golding et al., 1996	13					613/ 23	college undergrads re: repressed memories
Elliott & Fox, 1994	30	14	44		19	484/ 150	college undergrads
*Melchert & Parker, 1998	19.8					429/ 111	college undergraduates
*Schooler et al., 1998a,b	100			100		7	corroborated cases of recovered abuse memories

Dijkstra, 1998	66%					15	sexually abused males
Rogers et al., 1998	2%**	22	44			217	university students
*Joslyn, Carlin & Loftus, 1998	30***	59****				799/ 176	university students
*Epstein & Bottoms, 1998	30++					1,712 283	university students
*Edwards et al., 1998; Edwards et al., 2001; Fivush & Edwards, 2004	28f+ 20m					9,115/ 3,882	adverse childhood experiences in adults in an HMO
Grossman et al., (1999)	50	30	80		30	10	selected resilient survivors
*Melchert, 1999	32	27				590/ 45	university students
*Sacco & Farber, 1999	> amnesia on DES					259/ 123	college students
*Schooler, 2001	100			100		7	corroborated cases of recovered memories of CSA
*Freyd et al., 2001			14			202/ 78	college students
*Porter & Birt, 2001	4.6					306/ 30	Most traumatic & positive emotional experiences in college students
*Epstein & Bottoms, 2002	14					1,411/ 372	college students; replication study
*Henderson et al., 2002			86%^			79/22	autobiographical memory test in women college students
*Schultz et al., 2003			38			240/ 82	college students
*McNally et al., 2005	10.4		23** **			48	adults who had or had not experienced CSA

Palesh & Dalenberg, 2006			46.7			301/ 45	college students reporting CSA
*Geraerts et al., 2007	45*****			37/0 +++	28	128	adults with discontinuous or continuous memories for CSA

*signifies peer review journal publication.

** memory for "most traumatic event" (not necessarily but including childhood sexual abuse).

+ forgetting of any childhood trauma, e.g CSA, physical abuse, injury, witnessing death

++ another 10% "suspected" abuse but had no memory, and another 5% said someone had "suggested" abuse but they did not remember it.

***30% "not remembered" from 384 sexual events reported by 176 sexually abused subjects.

**** "not thought about" the sexual abuse.

**** 11 of 48 Ss "reported recalling memories of CSA after many years of not having thought about their abuse" (p. 337)

**** 57 of 128 Ss reported being "completely unaware" of ever being a victim of CSA

+++ 37% frequency of corroboration outside vs. 0% in therapy

^ 19 of 22 Ss failed to report clear, specific sexual abuse memories on the Autobiographical Memory Test; some Ss reported overgeneral abuse memories

CF= % complete forgetting; PF= % partial forgetting; F+P= % combined complete & partial forgetting; IC= % sample for which there was some sort of independent corroboration; Rx+ %

Ss in therapy; N/n= Total sample size/Ss with history of CSA; Sample= sample description; CSA= childhood sexual abuse

RANDOM SAMPLES

<i>Study</i>	<i>CF</i>	<i>PF</i>	<i>F+P</i>	<i>IC</i>	<i>Rx</i>	<i>N/n</i>	<i>Sample</i>
*Feldman-Summers & Pope, 1994			40	47	56	330/ 72	psychologists USA
*Westerhof et al. 2000	22	17	39	69	68	308/ 30	psychologists Netherlands
*Fish & Scott (1999)	17	35	52		44	423/ 134	counselors
*Elliott & Briere, 1995; *Elliot, 1998	20	22	42	7 13		505/ 116	general population
*Polusny & Follette, 1996	8		69			223	psychologists
*Melchert, 1996, 1998	18					553/ 74	college undergrads
Brewerton et al., 1999	72+	26				3006/ 51	female adults from random telephone survey
Golding et al. (ongoing)	14					663	telephone survey re: repressed memories
*Wilsnack et al., 2002	27.5 31.2+ +				1.8	771/ 153	Face-to-face interview in a National Study of Women's Health

*signifies peer review journal publication

+amnesia significantly correlated with lifetime and current PTSD, depression, bulimia nervosa, and chemical dependency

++27.5% complete forgetting of = familial abuse; 31.2% = extra-familial abuse

CF= % complete forgetting; PF= % partial forgetting; F+P= % combined complete & partial forgetting; IC= % sample for which there was some sort of independent corroboration; Rx+ % Ss in therapy; N/n= Total sample size/Ss with history of CSA; Sample= sample description; CSA= childhood sexual abuse

PROSPECTIVE STUDIES

<i>Study</i>	<i>CF</i>	<i>PF</i>	<i>F+P</i>	<i>IC</i>	<i>Rx</i>	<i>Nn=</i>	<i>Sample</i>
*Williams, 1994	38** 16			100	0	129	17-yr; clinical documentation of CSA
*Widom & Morris, 1998	39**			100	0	1,114 /96	20-yr; court substantiated CSA normal control Ss
*Bagley, 1990	16	11	27	100		57/ 19	20-yr; CSA removed to foster care
*Burgess et al., 1995	14	27	41	100		22	5-10 yr; daycare ritual abuse
*Burgess & Hartman, 1996; 2005			42	100		12	young children abused by babysitter who confessed
Williams & Banyard, 1998	55**			100	0	47	17-year prospective study, abused males
*Duggal & Sroufe, 1998	100			100		1	case study, as part of prospective study of child development
*Corwin & Olafson, 1998	100				100	1	video forensic interview at age 6 and again at 17
*Bull, 1999	100			100		1	single case of verified recovered memory
*Quas et al., 1999	5			100		43	children who had VCUG procedure
*Goodman et al. 2003; Alexander et al., 2005; Ghetti et al., 2006	1.1+ 15**			100		175	13-year prospective study of children between ages 4 to 17 originally involved in prosecution of CSA
*Bonanno et al., 2002, 2003, Negrao et al., 2007	41++ 4+			100		103 52C	7-year study of sexually abused girls from CPS vs. non-abused controls

*signifies peer review journal publication

**underreporting rate

+ no memory

CF= % complete forgetting; PF= % partial forgetting; F+P= % combined complete & partial forgetting; IC= % sample for which there was some sort of independent corroboration; Rx+ %

Ss in therapy; N/n= Total sample size/Ss with history of CSA; Sample= sample description;
CSA= childhood sexual abuse

